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U. S. DEPARTMENT OF AGRICULTURE.

OFFICE OF EXPERIMENT STATIONS.

DIETARY STUDIES

WITH REFERENCE TO THE

FOOD OF THE NEGRO IN ALABAMA

IN

1895 AND 1896.

CONDUCTED WITH THE COOPERATION OF THE TUSKEGEE NORMAL AND INDUSTRIAL INSTITUTE AND THE AGRICULTURAL AND MECHANICAL COLLEGE OF ALABAMA.

REPORTED BY

W. O. ATWATER and CHAS. D. WOODS.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1897.



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LETTER OF TRANSMITTAL.

United States Department of Agriculture, Office of Experiment Stations, Washington, D. C., January 15, 1897.

SIR: I have the honor to transmit herewith a report on investigations of the food of the negro in Alabama in 1895 and 1896, prepared by Profs. W. O. Atwater and Chas. D. Woods. These investigations constitute a part of the inquiries made with the funds appropriated by Congress "to enable the Secretary of Agriculture to investigate and report upon the nutritive value of the various articles and commodities used for human food," and were carried on under the supervision of Professor Atwater, special agent in charge of nutrition investigations, in accordance with instructions given by the Director of this Office.

The immediate purpose in conducting an inquiry into the food of the colored population of the Southern States was to obtain information as to the kinds, amounts, and composition of the food materials used. The ulterior purpose was to get light upon the hygienic and pecuniary economy of their diet, its deficiencies, the ways in which it might be improved, and the steps which should be taken to bring about an improvement.

The beginning of such an inquiry was undertaken in the neighborhood of the "Black Belt." The investigations were conducted in cooperation with the Tuskegee Normal and Industrial Institute. This institution was selected because of its relation to the negro, its favorable location, and the especial fitness of its principal, Mr. Booker T. Washington, to aid the Department in such an inquiry. The investigations were instituted by Mr. H. M. Smith, special agent of this Department, and the details of the observations were carried out in large part by Mr. J. W. Hoffman, of the Tuskegee Institute. In the course of the studies visits were made to Tuskegee by Professors Atwater and Woods.

The investigation received essential aid from the Agricultural and Mechanical College of Alabama at Auburn. President W. L. Broun took an especial interest in the work at Tuskegee, and afforded every facility for promoting its successful prosecution. The analyses of the food materials were made under the direction of Prof. B. B. Ross of

the college, who is also the chemist of the Alabama Experiment Station. These analyses formed a part of the investigation into the composition of food materials of Alabama, conducted by Professor Ross in cooperation with this Department.

This report is respectfully submitted, with the recommendation that it be published as Bulletin No. 38 of this Office.

Respectfully,

A. C. TRUE,

Director.

Hon. J. Sterling Morton,

Secretary of Agriculture.

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DIETARY STUDIES WITH REFERENCE TO THE FOOD OF THE NEGRO IN ALABAMA.

PURPOSE AND PLAN OF THIS BULLETIN.

The purpose of this bulletin is to give an account of studies of the food and nutrition of negroes in the neighborhood of Tuskegee, Ala. The investigation was made during the spring of 1895 and the winter of 1895-96, with the cooperation of the Normal and Agricultural Institute at Tuskegee and of the Alabama Agricultural and Mechanical College at Auburn.

The investigation includes examinations of 20 dietaries of 18 families. Some of the families lived in and close by the village of Tuskegee; the majority were on plantations from 2 to 9 miles distant. Some of the families, especially those in and near the village, showed by their improved conditions of living the noteworthy influence of the Institute and of association with people of intelligence and thrift. The same was true of some of the plantation families. The rest were very much like the ordinary plantation negroes, and were, indeed, selected as typical examples of the great mass of the colored people of this region. A number of the families were on a large plantation where the mortgage system prevails, and the plane of living is a very low one. The people studied represent the gradation from the lower to the higher grade of living which actually exists among the negroes in Alabama, and the observations thus help to illustrate not only the evils under which the colored people live, but some of the phases through which they are passing in their upward progress.

While the main subject is the food and nutrition of typical negro families in a representative district of the South, other observations pertaining to their conditions of life are also reported.

The general plan consisted in visiting each house or cabin from day to day for a period generally of two weeks, weighing the food used by the family, and taking specimens for analysis, notes being made at the same time regarding the people, their dwellings, farms, work, habits, and the like.

COMPOSITION OF ALABAMA FOOD MATERIALS.

In cooperation with this Department, Prof. B. B. Ross, of the Agricultural and Mechanical College of Alabama and the Alabama Experiment Station, made during the spring of 1895 and the winter and spring

of 1896 a considerable number of analyses of materials used as food in Alabama. Part of these were the specimens collected in the dietary studies reported beyond. The others were selected elsewhere as typical of the food of the region. The methods used for the analysis of vegetable foods were essentially those of the Association of Official Agricultural Chemists. The methods for animal foods were those used by Atwater and Woods.¹

Descriptions of specimens and results of the analyses are given in the following pages. Table 1 gives the composition of the food materials as found in the market, including both edible portion and refuse. Table 2 shows the composition of the edible portion calculated on the basis of the water content at the time the samples were taken. Table 3 gives the composition of the water-free substance of the edible portion. In addition to the ordinary data of composition, Tables 2 and 3 also give the estimated fuel value or potential energy of the foods. These estimates are made by assuming each gram of protein or carbohydrates to furnish 4.1 calories of energy and each gram of fat 9.3 calories.

DESCRIPTION OF SAMPLES OF FOOD MATERIALS.2

63. Beef, sirloin steak.—From native (Alabama) beef. Purchased in Auburn at 10 cents per pound. Contains more fat than average samples obtainable in this market.

180. Beef, rib roast.—From native beef, quite fat. Purchased in Auburn at 10 cents per pound.

226. Beef, roast, cross ribs.—From near shoulder above the brisket. Obtained in Birmingham, Ala.

231. Beef, round steak.—From native beef. Purchased at Tuskegee at 10 cents per pound.

255. Beef, round steak.—From native beef. Sample quite fat. Purchased in Auburn at 10 cents per pound.

256. Beef, round steak.—From native beef. Much leaner than the preceding.

333. Beef, shoulder steak.—From native beef. Purchased in Tuskegee at 10 cents per pound. Very deficient in fat.

334. Beef, shoulder steak.—From native beef. Purchased in Tuskegee at 10 cents per pound. Very deficient in fat.

336. Beef, shoulder steak.—From native beef. Purchased in Auburn at 10 cents per pound.

351. Beef, shoulder roast.—From native beef. Purchased in Auburn at 10 cents per pound.

1589. Mutton, shoulder.—Obtained from a packing establishment in Birmingham, Ala. Quite fat; quality above the average of mutton sold in Alabama markets.

¹Connecticut Storrs Sta. Rpt. 1891, p. 47; U. S. Dept. Agr., Office of Experiment Stations Bul. 29.

²The numbers used in this list are as a rule those employed in an unpublished compilation of analyses of American food materials.

2028. Pork, ribs.—Side of fresh pork, including ribs. Very fat. Animal medium size. Purchased in Auburn at 10 cents per pound.

2069. Pork, smoked ham.—From packing house in Birmingham. Contains more fat than most imported hams.

2071. Pork, smoked ham.—Home cured ham from native Alabama hog. Cured in smokehouse and also salted. Sample somewhat fatter than ordinary home-cured hams.

2091. Pork, smoked shoulder.—From packing establishment in Birmingham. From animal of medium size.

2125. Pork, salt sides.—Cured and salted. Purchased at a store in Auburn at 8 cents per pound. Sample contained three short ribs.

2126. Pork, salt sides.—Cured and salted. Purchased in Auburn at 8 cents per pound. Sample contained one rib. Proportion of fat somewhat below the average of salt pork on the market.

2127. Pork, salt sides.—Side of pork cured as above. Purchased in Auburn at 8 cents per pound. This and the two preceding samples were packed in Western markets,

2128. Pork, salt sides.—Cured salt pork or bacon. Obtained from packing establishment in Birmingham. Not so strongly salted as most of the Western meats.

2129. Pork, salt sides.—Home-cured bacon cured in old-style smoke-house and also salted. Sample quite fat.

2130. Pork, salt sides.—Purchased in Tuskegee.

2702. Chicken.—Full grown. Purchased in Auburn. Price 25 cents.

2705. Chicken.—Full grown.—Larger than average. Price 30 cents.

2756. Eggs.—Purchased in Auburn at $12\frac{1}{2}$ cents per dozen.

4042. Lard.—Purchased as pure leaf lard in Auburn.

4049. Lard.—Purchased in Tuskegee.

¹14. Butter.—Composite sample from churnings of three families in vicinity of Tuskegee.

¹60. Butter.—Purchased in Auburn.

5036. Corn meal.—Unbolted. From Tuskegee. Proportion of bran approximately normal.

5037. Corn meal.—Unbolted. From Tuskegee. Price 75 cents per bushel. Proportion of bran quite high.

5038. Corn meal.—Unbolted. From Tuskegee. Purchased from the Institute.

5039. Corn meal.—Purchased from store on plantation near Tuskegee. Appears to have been partially bolted.

5040. Corn meal.—Quality about the same as preceding.

5041, 5042. Corn meal.—Native. Unbolted.

5343. Wheat flour.—From Tuskegee.

5344. Wheat flour.—From Tuskegee. Practically all flours found in Alabama are made from Western wheat in Western mills.

6026. Molasses.—A dark-colored centrifugal molasses from Louisiana.

¹ These are the Alabama Experiment Station laboratory numbers.

It represents fairly well the quality of the average molasses consumed on the plantations. During the fall and early winter, however, homemade cane sirup is largely used.

6030. Molasses .- Native.

6031. Sorghum.

6528. Beans, string.—Ordinary running variety. This particular variety is more commonly cultivated than any other during the latter part of the season.

6529. Beans, butter.—Common variety. Purchased in pod.

6547. Beets.—Ordinary blood-red variety. Small size.

6557. Cabbage.—An early variety. Head of medium size.

6560. Collards.—This is a variety consumed to a large extent by the colored population, although the consumption of this vegetable is greater at some seasons than it was during the study.

6586. Corn, green.—Ordinary garden variety. Purchased in the ear.

6654. Cowpeas, green.—This is the ordinary cowpea, fresh from the vine, and represents quite an early variety. The peas as purchased had been removed from the pod, and hence the refuse is not taken into consideration.

6642. Cowpeas, dried.—Grown on Institute farm, Tuskegee. This sample is the ordinary speckled pea and is more generally grown than any other variety. It is planted in the early summer and harvested in latter part of summer or early fall. The pea fresh from the pod is an important article of food in the early fall, and the dried pea, when properly cooked, becomes quite soft and palatable. It is little used out of its immediate season, however.

6643. Cowpeas, dried.—Variety known as the Clay pea.

6644. Cowpeas, dried.—Reddish brown in color. Not so much used as the speckled pea.

6645. Cowpeas, dried.—Speckled variety.

6646. Cowpeas, dried.—Black variety. Not much used in this section. The four last samples were obtained in the Auburn market.

6652, 6653. Cowpeas, dried.—From Tuskegee.

6590. Cucumbers.—Large size. Form very much elongated.

6595. Turnip greens (salad).—This sample was gathered with a view to the use of the tops for the preparation of the so-called turnip salad, while sample 6938 was selected with a view to the use of the root or the turnip proper.

6609. Okra.—Also an early variety. Pods somewhat elongated.

6743. Potatoes.—A late variety. Small size.

6896. Squash.—Ordinary crook-neck variety, which is more commonly grown in this section than any other variety. Medium size. Average weight about half a pound.

6860, 6861. Sweet potatoes.—Ordinary white. Compact form. As these samples were procured for analysis out of season, and as the specimens contained, as a consequence, less than the normal amount

of water, it was deemed best in giving the analysis of the fresh material to calculate the same on a basis of 64.32 per cent water, this being the average water content of 15 samples of potatoes previously analyzed in proper season.

6918. Tomatoes.—A large, early variety. The only variety obtainable at this early date in the season.

6938. Turnips.—A small variety, with very long, tapering root.

8146. Watermelon.—Large rounded variety. The melons selected for analysis had an average weight of 26 pounds.

Professor Ross, in submitting his report of the foods analyzed, writes as follows:

We have, in these investigations, analyzed specimens of all the more important meats in use in this section. The vegetable products selected for analysis were those obtainable during the latter part of the spring and early part of the summer. They represent quite fairly the vegetable foods in use throughout a very considerable area of country, and their composition, as shown by analysis, indicates that a number of the more common food materials of this class are undoubtedly of a high nutritive value.

While practically all of the vegetables included in our investigations are cultivated and utilized by the white portion of the agricultural population, the variety and number of vegetable foods grown and utilized by the negro laborer is much less comprehensive. A personal inspection of a number of gardens cultivated by the colored population in this vicinity reveals the fact that not more than half a dozen varieties of vegetable foods are grown by those producing vegetables for their own consumption, and in a number of cases the variety is much smaller.

The vegetables most generally cultivated are turnips, collards, string beans, corn, and Irish potatoes, while cabbage is grown to a somewhat less extent. At a somewhat later period in the season cowpeas replace some of the vegetables named, while in the latter part of the summer or in the early fall the sweet potato comes into use.

The turnips are cultivated almost exclusively for the tops or "turnip greens," which are used as a pot herb, which is locally called "salad," while collards are utilized in season in similar manner. These two vegetables are probably employed for food purposes by the colored laborer to a greater extent than almost any other vegetable food, and either one or the other can be obtained at almost any time from April to October, as turnips are grown from both spring and fall plantings, while collards can be obtained at almost any time during the middle and latter part of this period. The importance of these facts will be observed when a reference is made to the composition of both collards and turnip greens, the percentages of protein, as calculated on a water-free basis, being in excess of that of cowpeas. As the ordinary diet of the average colored laborer is characterized by the presence of excessive quantities of fat and carbohydrates and corresponding deficiencies of protein, it is of course quite obvious that the employment of the above vegetable foods will serve to some extent at least to overcome the great disproportion between fuel ingredients and flesh-forming constituents which exists in the dietary of the average laborer.

.

¹ That is, they are cooked before being eaten.

Table 1 .- Composition of Alabama food materials as purchased (including both edible portion and refuse).

Kind of food material.	Reference number.1	Refuse.	Water.	Protein.	Fat.	Carbo- hydrates.	Ash.	Fuel value per pound.
ANIMAL FOOD. Beef: Sirloin steakRib Crossrib	63 180 226	Per ct. 12. 0 26. 7 12. 8	Per ct. 59. 4 50. 3 57. 4	Per cent. 17.5 12.4 16.1	Per ct. 10.1 10.0 13.0	Per cent.	Per ct. 1.0 .6 .7	Calories. 750 650 850
Round Do Do	231 255 256	3. 4 4. 8 6. 5	72. 8 66. 7 68. 8	21. 4 18. 1 18. 7	1.3 9.4 4.8		1. 1 1. 0 1. 2	455 735 550
Average		4.9	69. 4	19. 4	5. 2		1.1	580
Shoulder steak Do Do Do	333 334 336 351	12. 5 17. 1 7. 3 16. 4	65. 8 62. 3 68. 8 62. 3	19. 6 18. 4 18. 5 14. 5	1. 1 1. 2 4. 3 6. 0		1. 0 1. 0 1. 1 . 8	410 390 525 525
Average Mutton, shoulder Pork:	1589	13. 4 14. 6	64. 8 55. 7	17. 7 15. 5	3. 1 13. 4		1.0	460 855
Ribs	2028	12.0	34.9	10. 6	41. 9		3.7	1, 965
Do		2.0	22. 0	14. 0	55. 6		6. 4	2, 605
Average Smoked shoulder	2091	10.4 17.7	29. 0 40. 8	12. 9 13. 3	42. 7 23. 7		5. 0 4. 5	2, 040 1, 250
Salt sides ²	2125 2126 2127 2128 2129 2130	9. 1 9. 5 2. 9 7. 2 8. 7 9. 5	13. 3 20. 9 14. 6 16. 7 7. 1 10. 8	6. 2 9. 4 7. 9 8. 6 7. 0 6. 0	67. 0 53. 0 68. 6 64. 3 72. 8 70. 9		4. 4 7. 2 6. 0 3. 2 4. 4 2. 8	2, 940 2, 410 3, 040 2, 875 3, 200 3, 105
Average Poultry: Chicken		7.8 31.4	13. 9 52. 4	7. 5 14. 4	66.1		4.7	2, 930 315
Do	2705 2756	23, 3	49. 1 66. 8 . 4	14. 8 13. 2 . 3 . 2	12. 0 9. 3 99. 3 99. 8		.8	780 640 4, 195 4, 215
Butter	3 14 3 60		15. 8 23. 6	1.2	82. 4 70. 3		. 6 4. 8	3, 500 2, 990
Average			19.7	1.2	76.4		2.7	3, 245
VEGETABLE FOOD.								
Corn meal, unbolted	5036 5037 5038 5039 5040 5041 5042	10. 1 24. 1 8. 9 4. 2 5. 1 11. 3 13. 0	10. 4 9. 2 10. 5 10. 4 10. 4 10. 2 10. 8	7.3 6.5 7.8 7.5 7.5 7.7 8.0	4.1 3.5 4.3 4.4 4.3 4.0 4.5	66. 8 55. 7 67. 3 72. 2 71. 4 65. 6 62. 6	1.3 1.0 1.2 1.3 1.3 1.2	1. 550 1, 305 1, 580 1, 670 1, 650 1, 535 1, 505
Average		10.9	10.3	7.5	4.1	66.0	1.2	1, 540
Wheat flour ² Do ²	5343 5344		11. 1 10. 7	9. 9 9. 3	. 9	77. 7 78. 9	.4	1, 665 1, 675
Average Molasses, New Orleans 2. Molasses, native Molasses, sorghum Beans, string Beans, butter Beets Cabbage Collards Corn, green	6026 6030	7. 0 50. 5 16. 6 19. 4 55. 3 61. 1	10. 9 23. 1 26. 2 22. 9 82. 6 29. 1 70. 9 74. 5 39. 5 28. 1	9. 6 1. 3 . 9 . 7 2. 1 4. 7 . 9 1. 2 1. 5 1. 4	.9 .1 .2 .1 .2 .3 .1 .1 .2 .4	78. 3 68. 3 72. 1 75. 1 7. 3 14. 4 10. 9 4. 2 2. 9 8. 7	3 7.2 .6 1.2 .8 1.0 .6 .6	1, 670 1, 300 1, 365 1, 415 185 370 225 105

The numbers used in an unpublished compilation of analyses of American food materials.
 Not native Alabama food materials.
 Alabama Experiment Station laboratory numbers.

Table 1.—Composition of Alabama food materials as purchased (including both edible portion and refuse)—Continued.

Kind of food material.	Reference number.	Refuse.	Water.	Protein.	Fat.	Carbo- hydrates.	Ash.	Fuel value per pound.
VEGETABLE FOOD—cont'd. Cowpeas, dried		Per ct.	Per ct. 11. 9 11. 2 11. 6 12. 2 11. 1 11. 9 14. 6	Per cent. 19.9 21.8 22.1 22.1 22.6 22.3 20.8	Per ct. 1.5 1.2 1.3 1.4 1.4 1.1	Per cent. 62. 9 62. 5 61. 4 60. 7 61. 1 61. 3 59. 3	Per ct. 3.8 3.3 3.6 3.6 3.8 3.4 3.7	Calories. 1, 605 1, 620 1, 610 1, 600 1, 615 1, 600 1, 555
Average Cowpeas, green. Cucumbers Greens, turnip tops. Okra. Potatoes Squash	6654 6590 6595 6609 6743 6896	32. 6 13. 7 26. 9	12. 1 65. 9 63. 9 65. 9 80. 2 79. 9 68. 7	21. 7 9. 4 . 6 9. 5 1. 0 1. 9	1.3 .6 .6 .1	61. 3 22. 7 2. 7 22. 6 4. 6 17. 1 3. 3	3. 6 1. 4 .2 1. 4 .4 1. 1	1, 600 620 60 620 110 355 75
Sweet potatoes	6860 6861		64. 3 64. 3	1. 6 2. 1	. 3	32. 8 31. 4	1.0 1.3	650 660
Average Tomatoes. Turnips Watermelon.	6918	2. 0 31. 0 60. 9	64. 3 90. 8 61. 2 36. 0	1.9 1.4 1.0 .2	.6 .3 .1 .1	32. 1 4. 7 6. 3 2. 7	1.1 .8 .4 .1	655 125 140 60

Table 2.—Composition of fresh, edible portion of Alabama food materials.

		·					
Kind of food material.	Reference number.	Water:	Protein.	Fat.	Carbo- hydrates	Ash.	Fuel value per pound.
ANIMAL FOOD.							
Beef:		Per cent.	Per cent.	Per cent.	Per cent.		Calories.
Sirloin steak	63	67.5	19.9	11.5		1.1	855
Rib Cross rib	180 226	68. 6 65. 8	16. 9 18. 4	13. 6 14. 9		.9	890 970
C1088 110	220	05.8	16. 4	14. 9		. 3	310
Round	231	75.4	22.1	1.3		1. 2	465
Do	255	70.0	19.0	9.9		1.1	770
Do	256	73. 6	20. 0	5.1		1. 3	585
Average		73.0	20.4	5.4		1.2	605
Shoulder steak	333	75, 2	22.4	1.3		1.1	470
Do	334	75. 1	22. 3	1.4		1. 2	475
Do	336	74. 2	20.0	4.7		1.1	570
Do	351	74.5	17.4	7.1		1.0	625
Average		74.8	20, 5	3.6		1.1	535
Mutton, shoulder	1589	65. 2	18. 2	15.6		1. 0	995
Pork:							-
Rib	2028	39.7	12.0	47. 7		. 6	2, 235
Smoked ham 2	2069	44. 2	14. 5	36, 7		4, 6	1,820
Do		22. 4	14.3	56.8		6. 5	2, 665
Average Smoked shoulder	2091	33, 3	14.4	46. 7 28. 8		5.6	2, 240
Smoked shoulder	2091	49.6	16. 1	28. 8		5.5	1, 515
Salt sides 2		14.7	6.8	73. 7		4.8	3, 235
Do 2	2126	23. 1	10.4	58. 6		7.9	2, 665
Do 2		15. 1	8. 2	70.6		6.1	3, 130
Do	2128 2129	18.0 7.7	9.3 7.7	69.3 79.7		3.4 4.9	3, 100 3, 505
\mathbf{D}_{0}^{0}	2130	12.0	6.6	78.3		3.1	3, 425
Average		15. 1	8.2	71.7		5, 0	3, 180
Chicken	2702	76. 3	21.1	1.6		1.0	460
Do	2705	64. 0	19. 4	15. 6		1.0	1, 020
Eggs	2756	74.1	14.7	10.3		.9	710
Lard 2	4042	. 4	.3	99.3			4, 195
Do 2	4049		.2	99.8			4, 215

 ¹ The numbers used in an unpublished compilation of analyses of American food materials.
 ² Not native Alabama food material.

Table 2.—Composition of fresh, edible portion of Alabama food materials—Continued.

Kind of food material.	Reference number.	Water.	Protein.	Fat.	Carbo- hydrates.	Ash.	Fuel value per pound.
ANIMAL FOOD—continued.							
Butter	114 160	Per cent. 15. 8 23. 6	Per cent. 1.2 1.3	Per cent. 82. 4 70. 3	Per cent.	Per cent. 0.6 4.8	Calories. 3, 500 2, 990
Average		19.7	1.3	76.3		2.7	3, 245
VEGETABLE FOOD.							
Corn meal, unbolted Do Do Do Do Do Do Do	5036 5037 5038 5039 5040 5041	11.6 12.1 11.5 10.9 11.0	8. 1 8. 6 8. 5 7. 8 7. 9 8. 7	4.6 4.6 4.7 4.6 4.5 4.6	74. 3 73. 4 73. 9 75. 4 75. 3 73. 9	1. 4 1. 3 1. 4 1. 3 1. 3 1. 3	1, 725 1, 720 1, 730 1, 740 1, 740 1, 730
Do	5042	12.4	9. 3	5. 2	71.9	1.2	1,730
Average		11.6	8.4	4.7	74.0	1.3	1,730
Wheat flour 2	5343 5344	11. 1 10. 7	9. 9 9. 3	.9	77. 7 78. 9	.4	1, 665 1, 675
Average Molasses, New Orleans ² Molasses, native Molasses, sorghum Beans, string Beans, butter Beets Cabbage. Collards Corn, green	6030	10. 9 23. 1 26. 2 22. 9 88. 7 58. 9 85. 0 92. 5 88. 3 72. 1	9. 6 1. 3 . 9 . 7 2. 3 9. 4 1. 1 1. 5 3. 3 3. 7	.9 .1 .2 .1 .2 .6 .1 .1 .5	78.3 68.3 72.1 75.1 7.9 29.1 13.1 5.2 6.5 22.4	.3 7.2 .6 1.2 .9 2.0 .7 .7 1.4	1 670 1, 300 1, 365 1 415 215 740 270 130 205 530
Cowpeas, dried	6642 6643 6644 6645 6646 6652 6653	11. 9 11. 2 11. 6 12. 2 11. 1 11. 9 14. 6	19. 9 21. 8 22. 1 22. 1 22. 6 22. 3 20. 8	1. 5 1. 2 1. 3 1. 4 1. 4 1. 1 1. 6	62. 9 62. 5 61. 4 60. 7 61. 1 61. 3 59. 3	3. 8 3. 3 3. 6 3. 6 3. 8 3. 4 3. 7	1, 605 1, 620 1 610 1, 600 1, 615 1, 600 1, 555
Average Cowpeas, green Cucumbers Greens, turnip tops Okra Potatoes. Squash	6654 6590 6595 6609 6743 6896	12. 1 65. 9 94. 7 65. 9 92. 9 79. 9 93. 9	21.7 9.4 .9 9.5 1.2 1.9	1.3 .6 .1 .6 .1	61. 3 22. 7 4. 0 22. 6 5. 3 17. 1 4. 4	3. 6 1. 4 . 3 1. 4 . 5 1. 1	1,600 620 95 620 125 355 105
Sweet potatoes	6860 6861	64. 3 64. 3	1.6 2.1	.3	32. 8 31. 4	1.0 1.3	650 660
Average Tomatoes. Turnips Watermelon.	6918 6938 8146	64. 3 92. 6 88. 7 92. 0	1. 9 1. 5 1. 5 . 6	.6 .3 .1 .2	32. 1 4. 8 9. 2 6. 9	1.1 .8 .5	655 130 205 150

Alabama Experiment Station laboratory numbers.
 Not native Alabama food material.

Table 3.—Composition of water-free substance of Alabama food materials.

Kind of food material.	Reference number.	Nitrogen.	Protein.	Fat.	Carbo- hydrates.	Ash.
ANIMAL FOOD.						
Beef:		Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Sirloin steak	63	9. 41	61.4	35. 3		3. 3
Rib	180	8.41	53.7	43.4		2.9
Cross rib	226	8.40	53.8	43.7		2.5
Round	231	13. 69	89.8	5.4		4.8
Do	255	10 03	63. 3	33. 1		3.6
Do	256	12. 13	75. 8	19.4		4.8
Average		11. 95	76.3	19. 3		4.4
Attended			70.0			

¹ The numbers used in an unpublished compilation of analyses of American food materials.

Table 3 .- Composition of water-free substance of Alabama food materials-Continued.

Kind of food material.	Reference number.	Nitrogen.	Protein.	Fat.	Carbo- hydrates.	Ash.
ANIMAL FOOD—continued. Shoulder steak. Do. Do. Do.	. 333 334 336 351	Per cent. 13. 84 13. 89 11. 94 10. 92	Per cent. 90. 3 89. 6 77. 6 68. 0	Per cent. 5. ? 5. 6 18. 0 28. 0	Per cent.	Per cen 4 4 4 4
Average		12. 65 8. 31	81. 4 52. 2	14. 2 44. 9		4 2
Ribs	2028	3. 25	19.9	79.0		1
Smoked ham 1	2069 2071	3. 74 2. 83	26. 0 18. 4	65. 8 73. 2		8.
Average	2091	3, 28 4, 50	22. 2 31. 9	69. 5 57. 2		8 10
Salt sides 1	2125 2126	1. 31 2. 31	7. 9 13. 6	86. 4 76. 1		5
Do 1 Do 1 Do Do Do	2127 2128 2129 2130	1. 54 1. 98 1. 08	9. 6 11. 3 8. 3 7. 5	83. 2 84. 5 86. 4 89. 0		10 7 4 5 3
Average			12.9	80.4		6
Poultry: Chicken Do	2702	13.60 8.58 7.97	89. 1 53. 8	6. 7 43. 5		4 2
Do Eggs .ard ¹ 	4042	7. 97 . 04	56. 9 . 3 . 2	39. 7 99. 7 99. 8		3
Butter Do	214	. 22	1. 4 1. 6	97. 8 92. 1		6
Average	I		1. 5	95. 0		8
VEGETABLE FOOD.	5036		9.1	5. 2	84. 1	1
Do	5037		9. 8 9. 6	5. 2 5. 2 5. 3	83. 5 83. 6	1
Do	5040		8. 7 8. 9 9. 9	5. 2 5. 1 5. 1	84. 6 84. 5 83. 5	1
Average			9. 5	6. 0 5. 3	82.1	
Vheat flour 1			11. 2 10. 3	1.0	87. 4 88. 4	
			10.7	1.0	87. 9	
Iolasses, New Orleans 1 Iolasses, native Iolasses, sorghum Beans, string Leans butter	6030 6031 6528 6520		1.7 1.2 .9 20.2 23.0 7.4	.1 .2 .1 1.9 1.4	88. 9 97. 8 97. 4 70. 2 70. 7 87. 3	9 1 7 4 5
eets abbage ollards orn, green	6557 6560 6586		19. 4 28. 1 13. 3	1. 5 4. 1 3. 9	69. 7 55. 7 80. 2	9 12 2
owpeas, dried Do Do	6642 6643 6644 6645		22. 5 24. 5 25. 0 25. 2	1. 7 1. 4 1. 5 1. 6	71. 4 70. 4 69. 4 69. 1	4 3 4 4
Do	6646 6652 6653		25. 4 25. 3 24. 4	1. 6 1. 2 1. 8	69. 1 68. 7 69. 6 69. 4	4 3 4
Average owpeas green ucumbers reens, turnip tops kra otatoes quash	6654 6590 6595 6609 6743 6896		24. 6 27. 7 17. 2 29. 4 16. 9 9. 4 14. 5	1. 6 1. 8 . 8 4. 5 1. 1 . 2 3. 2	69. 7 66. 4 75. 8 49. 6 75. 4 84. 9 72. 6	4 4 6 16 6 5
weet potatoes	6860 6861		4.5 5.9	. 9 2. 4	91. 8 88. 0	2 3
Average Omatoes Vurnips Vatermelon	6918 6938 8146		5. 2 19. 6 13. 2 7. 3	1.7 4.3 .9 2.9	89. 9 65. 4 81. 1 86. 6	3. 10. 4. 3.

Not native Alabama food material.

² Alabama Experiment Station laboratory numbers.

THE INVESTIGATIONS AT TUSKEGEE.

THE REGION AND THE PEOPLE.

The region around Tuskegee and the colored people who make up the larger part of its population and their ways of living are described as follows by Mr. H. M. Smith:

The region.—Tuskegee is situated in the eastern part of Alabama on the edge of the so-called black belt. The term black belt is applied to a region with boundaries not very sharply defined, but extending from the Gulf of Mexico northward as far as central or northern Alabama and Georgia, and westward to Louisiana and Texas. Two explanations are given of the term "black belt," one ascribing it to the soil, which in a large part of the region is dark in color; the other to the preponderance of the colored population. Either explanation would fit the case. The naturally fertile soil made slave labor profitable before the war. The negro population was then, and still continues to be, large, so that to-day in the county in which Tuskegee is located (Macon), the ratio of the negroes to the whites is over three to one.

The negroes about Tuskegee.—The negroes of this section, in which there are but few large towns, are mostly engaged in farming. Very few as yet own any land; the larger number work small farms rented from white proprietors. As a class they are improvident, they have very little ambition, and little incentive to work because of their ignorance of any better conditions of living than those immediately around them. Their wants like their resources are few, so that with all their poverty they appear to be a happy and contented people. In the neighborhood of the Tuskegee Institute were, however, most noteworthy indications of progress. Comparatively few of the families lived in one-room log cabins; a number had frame houses with several rooms, respectable furniture, and more or less of the conveniences of modern life such as are found in the houses of the working classes of other regions.

Negro cabins.—In the country practically all the negroes live in cabins, generally built of logs, with only one, or at most two rooms. The spaces between the logs were either left open, admitting free passage of the wind in winter as well as in summer, or were chinked with earth or occasionally with pieces of board. The roofs were covered with coarse shingles or boards and were apt to be far from tight. The windows had no sash or glass, but instead, wooden blinds, which were kept open in all weather to admit the light. The cabins generally stood on posts a few feet from the ground; the door was approached by a box or a few broken steps. The open space between the floor of cabin and the ground was generally occupied by dogs, with which but few families were not supplied.

The one-room cabins had a door in front, a fireplace on one side, and

perhaps one or two windows in the side or rear walls. The one room served for kitchen and living and sleeping room. Occasionally a small annex was built on the rear and served as a storeroom.

The two-room cabins differed from those of one room in that they were longer and divided in three parts. The middle division had a roof and floor but was open front and back, and thus served as a sort of porch. One of the rooms served as kitchen and living room, the other as sleeping room. The chimneys were built of small logs laid against the wall on the outside and reached no higher than the roof, and in some cases not quite so high. These logs were chinked with clay, with which the interior was also lined. The chimney opened into the cabin, making a fireplace about four feet square. The cabin floors were made of rough boards with cracks of varying widths. In one cabin situated close by a swamp, which abounded in moccasins, some of the cracks in the floor were an inch or more wide. In response to a question put in all seriousness whether the snakes could not crawl in through them, the woman replied, "Oh, yes, they gets in sometimes, but I bresh 'em out."

The furniture of these cabins was very limited, consisting of one or two roped bedsteads with corn-shuck mattresses and patchwork quilts, a small portable wooden cupboard containing a few dishes, a wooden chest or old trunk used as a receptacle for both food and clothing, a cheap pine table, a few homemade chairs, a pair of andirons and an iron pot in the fireplace, an earthenware jar used for a churn, and sometimes a clock. Occasionally there would be a few books or a picture.

In addition to the house there was generally a small, rough shed or barn with walls on either three or four sides. Both the cabins and sheds or barns were as a rule much dilapidated.

Gardens and farms.—A few of the families had gardens; that is to say, small patches of ground close to the houses were used to grow collards, turnips, and occasionally some other vegetables.

The farms occupied by individual tenants varied from 20 to 60 acres. They were commonly spoken of as one, two, or three mule farms. The area which could be cultivated by one mule was variously stated at from 25 to 40 acres.

Of the field crops used for food the most common were corn, sweet potatoes, sugar cane, and sorghum, the last two being used to make molasses for home consumption. On only one of the plantation farms visited were any cowpeas or peanuts grown. Quite a number raised corn for the nourishment of their families and live stock, though very few raised enough to supply all their needs. Some were so improvident as to sell it as soon as it was marketable, even though they had to buy it back again later in the season. The staple crop was cotton, to which the larger part of the cultivated land was devoted. The status of a negro farmer here is decided mainly by the number of bales of cotton he can produce in a year. A greater diversity of crops is one of the great needs. Tuskegee Institute is making an effort to encourage

the cultivation of corn, peas, and other crops, both for food of man and to aid in the keeping of more and better live stock.

Live stock.—The live stock of the negro farmers varied with the season. Generally each one had a mule or an ox, one or more pigs, frequently a cow, and very often hens. The oxen were poor and underfed. It was interesting to compare the small loads drawn by these small, half-starved creatures with those drawn by the cattle belonging to the Institute, which were of good breeds and thoroughly well fed and cared for.

The negro farmer's life.—The negro farmer generally works about seven and a half months during the year. The busy seasons are two, that of planting and cultivating the cotton, which begins in March and lasts until the end of June, and that of cotton picking, which begins about the middle of August and continues until the latter part of November. The rest of the time is devoted to visiting, social life, revivals or other religious exercises, and to absolute idleness. working season opens with the plowing of the land; planting begins in April, and is followed by the "chopping," i. e., the hoeing and thinning out of the cotton. This is done by both men and women. swing their large hoes in a slow, regular movement, frequently keeping time to the tune of some plantation song. After the chopping and while the crop is maturing, is a period of rest called "laying-by time." This period the negro enjoys by holding "bush meetings" (camp meetings) and visiting among his friends on neighboring plantations. Whole families thus visit with each other for a week at a time. By the middle of August the cotton begins to open, and then comes a busy season of picking, when men and women, old and young, even the little children, are pressed into the work. During this season, as well as that of planting and chopping, work in the field begins at sunrise and lasts until sunset, with a short rest at noon. Toward the end of November the picking is over; then comes a season of general festivities. During the winter months the men pass much of their time in the house by the fire. One more thrifty than his neighbor may perhaps spend a few days fixing up his fences, or making chairs and baskets. But few of the negro farmers work on Saturday even in the busy season: instead, the whole family goes to the village and does its marketing, which consists principally of the purchase of a little corn meal and salt pork for the next week's rations.

The negro's earnings and business methods.—At the end of the season when the farmer has sold his cotton he has, if the crop was good, a little money, but this is usually soon spent and the rest of the year he lives from hand to mouth. He may occasionally collect a small load of dead limbs and fragments of stumps of trees and sell them for what he can get. He also earns a little money in other ways. The rate of wages may be inferred from the fact that when he works out his road tax, or that of some white man who employs him for the purpose, he is allowed

from 40 to 50 cents per day. When the negro has money he is ready to spend it for almost anything, and the skillful trader may urge goods upon him the purchase of which is most extravagant. After his cotton is sold and the mortgage on the crop is paid, he may spend a large part of the balance for a sewing machine or a modern cooking range, which are ultimately returned to the dealer at a large sacrifice. When he has no money he will buy on credit as much and as long as he can.

The mortgage system.—The negro farmers in this region have a custom of mortgaging their crops, which comes partly from necessity but largely from improvidence. A tenant is very apt to be without the money needed at the beginning of the season to buy seed, tools, or a mule, with which to commence work, and later for the food and clothing necessary for himself and family until his crop ripens. He tries to get over the difficulty by signing a "waive note," giving the first right to so much of the crop as may be necessary to cover the indebtedness incurred to meet these needs. The person to whom this mortgage is given may be the owner of the land he tills, or the proprietor of the store at which his supplies are purchased. The negro knows but little of accounts, and the white man who holds the mortgage keeps them; the rates of interest are high, and the mortgagee is not always generous or even just. At the end of the season if the crop is a failure the debtor has absolutely nothing; if the crop and the creditor's accounts are favorable there may be a fair balance on the debtor's side. This evil is often charged in some sections to the extortion and injustice of the white man; but it seems probable that the shiftlessness and improvidence of the negro which inevitably accompany his ignorance are largely to blame. The cure will only come with education; this must be industrial as well as intellectual. The influence of such an institution as that at Tuskegee in this direction is most salutary and fortunate.

Food of the negro.—The staple foods of the negroes of this region are fat salt pork, corn meal, and molasses. Of late, since wheat flour has become so cheap, it has been considerably used. The molasses is made from sorghum, or "millet," as it is called in this region, and sugar cane, both of which are grown in considerable quantities. The molasses from sorghum is generally preferred to that from cane. The molasses is made on the farms by a very primitive process. This consists in passing the cane between rollers to squeeze out the juice, and boiling the latter in open pans, which are set on furnaces roughly built of stone and clay. There are persons who go about from farm to farm with the rollers and make the molasses. Individual farmers who have no conveniences for making sirup carry their cane to other farms where it is worked. Only a part of the molasses used by the farmer is made on the farms, the rest is bought at the stores with other commodities.

Part of the corn meal is made from the corn grown on the farms, the rest is bought from dealers, and is uniformly unbolted.

The pork consists mostly of the fat sides, butchered and salted in

the meat-packing houses of Chicago and elsewhere, and brought in large quantities to the Southern market. Some pork is produced on the farms, but comparatively few swine were seen on those visited, nor was any kind of meat but fat pork, not even ham or shoulder, seen in any of the farmhouses. In the home of a well-to-do carpenter, which is located near the Institute (p. 23), fresh beef and mutton were used during the two weeks of a dietary study. Probably this case was exceptional; indeed, the only kind of meat which seemed to be in at all common use among the country people was fat pork. Whenever they spoke of meat they always meant fat pork. Some of them knew it by no other name, nor did they seem to know much of any other meat except that of opossum and rabbits, which they occasionally hunted, and of chickens which they raised to a limited extent.

Even among the white population in the village of Tuskegee the use of fresh meat was not at all large. The table of the hotel was well supplied with fried ham and pork, but there was comparatively little beef. Fresh beef was to be had at the market on two or three days in the week. This limited use of fresh meats could not be attributed to any lack of generous diet, for the tables of white people were bountifully spread. It seemed due to the agricultural conditions which obtain in the region, and to the difficulty of keeping fresh meat in the warm climate. The climate is not favorable to the growth of ordinary grasses which are so abundant in the beef-producing regions; comparatively few cattle are raised, and the meat is less fat, and less tender and juicy than that from the grazing regions farther north. In Knoxville, Tenn., for instance, where dietary studies have been lately made, in a region where grass and corn are abundant, the native beef was much more plentiful and appetizing, and the specimens analyzed in connection with dietary studies were considerably fatter, than those from Tuskegee and elsewhere in Alabama, and were in this respect more like those of meats in the Northern markets. Veal and mutton are even less common than beef. No sheep were seen in the country about Tuskegee and there are very few in the region.

The scarcity of fresh meat and the difficulty of preserving it doubtless goes far toward explaining the dietary tastes and habits of the people in general in this region, if not elsewhere in the South. The managers of the colored schools find their students decidedly averse to a diet materially different from that of salt pork, corn meal, and molasses, to which they have been accustomed at home.

The colored families near the village of Tuskegee, and some in the country, kept cows and had milk and butter. For making butter they used small, dash churns of glazed earthenware called "splashers," which are usually about 15 inches high by 8 in diameter. The fresh milk was put directly into the churn and successive milkings were added until it contained from 1½ to 2 gallons, and the whole churned without

¹ U. S. Dept. Agr., Office of Experiment Stations Bul. 29.

any attempt at removing the cream. The churning was done about once in two days, and from the above amount of milk a small saucerful of a soft, white, and watery butter would be obtained. The people made no attempt at working it, nor did they add salt, but ate it fresh. The buttermilk was drunk with decided relish.

No cows or milk were seen at any one of several cabins visited on a large plantation at some distance from the village where the life was said to be like that of the average plantation negro. The food consisted almost exclusively of fat pork, corn meal, and molasses.

Cooking.—The cooking is of the most simple and primitive character. It is nearly always done over the open fire. Only two of the families visited had stoves. One was that of the carpenter referred to above. He had been under the influence of the Tuskegee Institute. The following extract from a letter of Mr. Hoffman, of the Institute, who shared in the dietary investigations, is of special interest in this connection:

The daily fare is prepared in very simple ways. Corn meal is mixed with water and baked on the flat surface of a hoe or griddle. The salt pork is sliced thin and fried until very brown and much of the grease tried out. Molasses from cane or sorghum is added to the fat, making what is known as "sap," which is eaten with the corn bread. Hot water sweetened with molasses is used as a beverage. This is the bill of fare of most of the cabins on the plantations of the "black belt," three times a day during the year. It is, however, varied at times; thus collards and turnips are boiled with the bacon, the latter being used with the vegetables to supply fat "to make it rich." The corn-meal bread is sometimes made into so-called "cracklin bread," and is prepared as follows: A piece of fat bacon is fried until it is brittle; it is then crushed and mixed with corn meal, water, soda, and salt and baked in an oven over the fireplace. Occasionally the negroes may have an opossum. To prepare this for eating it is first put in hot water to help in removing a part of the hair, then covered with hot ashes until the rest of the hair is removed; thereupon it is put in a large pot, surrounded with sweet potatoes, seasoned with red pepper, and baked. One characteristic of the cooking is that all meats are fried or otherwise cooked until they are crisp. Observation among these people reveals the fact that very many of them suffer from indigestion in some form.

The food and cooking observed in the cabins visited were entirely in accordance with Mr. Hoffman's description, except that flour was used in every case. In how far this was due to the low price which has prevailed of late, and whether the use had extended generally through the black belt of course is not known. It is probable, however, that with the decline in the price of flour the negroes have been learning to use it, and liking its taste and being inclined to imitate the white man in diet as in other things, its use has become more or less common and will be likely to increase.

Clothing.—Of the clothing of the country negroes there is little to be said. It was for the most part coarse, scanty, and ragged. At their work the people did not commonly wear shoes, and for the women a cloth knotted around the head served as a hat whether in the house or the field.

METHODS OF THE DIETARY INVESTIGATIONS.

The details of the work at Tuskegee were carried out in the spring of 1895 by Mr. J. W. Hoffman, of the Institute, and Mr. H. M. Smith, special agent of this Department, and in 1896 by Mr. Hoffman. Mr. Green, the farm manager of the Institute, was very helpful in inducing families to allow the investigations to be carried on in their cabins. The whole was under the oversight of Mr. Washington.

The study of individual dietaries generally continued two weeks. On the first day the house was visited, and the pork, meal, flour, molasses, milk, and other food materials on hand were weighed. Each day thereafter a visit was made to the house, and if new materials had been bought meanwhile, they were also weighed. Arrangements were made by which such new materials were kept until they were weighed before any portion was used. As the food was generally purchased only once a week and consisted mainly of fat pork, corn meal, and molasses, the weighing of these articles was a simple matter. With milk, however, especial care had to be taken to insure accurate account of the quantity used. The weighing was done with a large grocers' scale and a small spring balance. At the end of the period of observation an inventory of the food materials on hand was made as at the beginning. The figures of these two inventories, with those of the materials purchased during the study, served for computing the quantities actually consumed. The houses were generally visited once and sometimes twice a day. With a horse and wagon it was not difficult to make the rounds between breakfast time and dark. A considerable number of samples of food materials used were taken for analysis and transmitted to Professor Ross in Auburn, as previously stated.

CALCULATION OF RESULTS.

The quantities of nutrients in the several dietaries were calculated from the weights of the food materials and the proportions of nutrients in each. As it was not found convenient to analyze specimens of all the materials used in each house, enough specimens were selected to give a general idea of the composition, and the composition of the others was assumed from the analyses of these and of other specimens of similar materials. The detailed tables of results show the number of specimens analyzed. As the food consisted almost entirely of salt pork, wheat flour, corn meal, molasses, and milk, materials of tolerably uniform composition, the errors involved in assuming the composition of the specimens not analyzed could hardly be of great importance.

The tabular statement of results beyond give the total quantities of food consumed by each family during the whole period of observation and also the estimated quantities per man per day. These latter estimates are made as follows: It is assumed that a man doing moderately hard muscular work will require on the average a certain amount of nutrients in his daily food, that a woman will eat less, and that young children will eat still less. Counting the amount for the man at

10, the proportions for women and children are taken empirically as follows:

Man	10
Woman	8
Boy 14 to 17 years old.	8
Girl 14 to 17 years old	
Child 10 to 13 years old	
Child 6 to 9 years old	5
Child 2 to 5 years old	
Child under 2 years old	

The above ratios accord with such observations of actual food consumption as are available and are used in other estimates of dietaries, the man to be at active and the women and children to have less or no manual labor. In these cases, where the women and children worked in the fields with the men, doubtless larger allowances for their food consumption in comparison with the men would have been more accurate. The ratios are, however, incapable of exact adjustment, and fortunately are of comparatively small importance here.

For various reasons it was found impracticable to collect the waste in the dietary studies. The waste was probably extremely small and for all practical purposes the figures reported may be considered as representing both food purchased and eaten.

DETAILS OF DIETARY STUDIES.

Part of the studies (Nos. 98-105) were made between April 25 and June 20, 1895. The others (Nos. 130-141) were made between December 8, 1895, and February 15, 1896. The details follow:

DIETARY OF A NEGRO CARPENTER'S FAMILY IN ALABAMA (No. 98).

The study began April 25, 1895, and continued fourteen days.

The members of the family and number of meals taken were as follows:

	Meals.
Man about 40 years old	42
Woman about 35 years old (42 meals × 0.8 meal of man) equivalent	nt
to	34
Boy 14 years old (42 meals × 0.8 meal of man) equivalent to	34
Boy 12 years old (42 meals × 0.7 meal of man) equivalent to	29
Boy 6 years old (42 meals × 0.5 meal of man) equivalent to	21
Boy 2 years old (42 meals × 0.4 meal of man) equivalent to	17
Total number of meals	177

Equivalent to one man for fifty-nine days.

Remarks.—This family lived in the outskirts of the village of Tuskegee, near the Institute. The father had been under the influence of the latter institution and had learned the carpenter's trade and was in the employ of the Institute. With his savings and labor he had built a very comfortable one-story frame house with four rooms, as shown by the picture (Pl. I, fig. 1). The house was plainly but neatly and very comfortably furnished. A garden supplied the family with vegetables, and two cows and a number of hens and turkeys furnished milk, eggs, and fowl for the table. They had fresh meat frequently, as well as fruits.

and vegetables. The condition of this family had been steadily improving since the husband came under the influence of the Institute. Instances of such thrift and comfort among the negroes of the region are extremely rare, and were found only in connection with the Institute. They illustrate not what the negro is, but what he may become.

Table 4.—Food materials in dietary No. 98.

	C	omposit	ion.			Weight used.			
Kind of food material.			Carbo-	Total	Total food	Nutrients.			
	Protein.	Fat.	hydrates.		mate- rial.	Protein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD.		n .	70		~	-	~	~	
Beef, round 1	Per ct. 19. 4 14. 9	Per ct. 5. 2 14. 9	Per cent.	\$0.10 .54	455 2,040	88 304	Grams, 24 304	Grams.	
Pork: Unsmoked side bacon ¹ Lard ¹	8. 0	63. 2 99. 3		. 51	3, 275 2, 380	262 7	2, 070 2, 363		
Total pork and lard				.90	5, 655	269	4, 433		
Chicken ¹ Eggs ¹ Butter ¹ Milk ²	14.7 13.2 1.2 3.5	6. 5 9. 3 82. 4 4. 2	5. 2	.10 .10 .44 5.04	905 595 990 57, 140	133 79 12 2,000	59 55 816 2, 400	2, 971	
Total animal food				7.22	67, 780	2,885	8, 091	2,971	
VEGETABLE FOOD.					-				
Cereals, sugar, etc.: Wheat flour ¹ Corn meal ¹ Rolled oats Sugar Molasses ¹	9. 3 8. 5 16. 8	.8 4.7 7.2	78. 9 73. 9 67. 0 100. 0 68. 3	1.40 .26 .01 .40 .44	21, 205 9, 300 115 3, 020 4, 410	1,972 790 19	170 437 8	16, 731 6, 873 77 3, 020 3, 012	
Total cereals and sugar				2. 51	38, 050	2,838	619	29, 713	
Fruits: Evaporated applesStrawberries	1.7	2.6	61. 3 6. 8	.08	310 665	5 7	8 4	190 45	
Total fruits				. 18	975	12	12	235	
Total vegetable food				2. 69	39, 025	2, 850	631	29, 948	
Total food				9, 91	106, 805	5, 735	8, 722	32, 919	

¹Average of analyses of similar Alabama foods.

²Fat only determined; protein and carbohydrates calculated as bearing corresponding ratio to average milk.

Table 5.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 98.

		2	Nutrient	s.	- ,	N			
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 14 DAYS. Beef, veal, and mutton Pork, lard, etc Poultry Eggs Butter Milk	5, 655	Grams. 392 269 133 79 1 2,000	Grams. 328 4,433 59 55 816 2,400	Grams.	Lbs. 5, 50 12, 50 2, 00 1, 30 2, 20 126, 00	Lbs. 0.90 .60 .30 .20	$Lbs. \\ 0.70 \\ 9.80 \\ .10 \\ .10 \\ 1.80 \\ 5.30$	Lbs. 6. 50	\$0, 64 .90 .10 .10 .44 5.04
Total animal food	67, 780	2, 885	8, 091	2, 971	149.50	6.40	17.80	6. 50	7. 22



Fig. 1.-Negro Carpenter's House. (DIETARY No. 98.)



Fig. 2.—House and Barn of Negro Farmer's Family. (Dietary No. 96.)



Fig. 3.—House, Barn, and Sheds of Negro Farmer's Family. (Dietaries Nos. 100 and 130.)



Table 5.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 98--Continued.

	773	1	Sutrient	8.	773 3	2			
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 14 DAYS—con. Cereals, sugars, starches. Fruits	Grams. 38, 050 975	Grams. 2,838 12	Grams. 619 12	Grams. 29, 713 235	Lbs. 83, 90 2, 20	Lbs. 6.30	Lbs. 1.40	Lbs. 65. 50	\$2.51 .18
Total vegetable food.	39, 025	2, 850	631	29, 948	86. 10	6.30	1.40	66.00	2.69
Total food	106, 805	5, 735	8,722	32, 919	235.60	12.70	19. 20	72, 50	9, 91
PER MAN PER DAY.									
Beef, veal, and mutton Pork, lard, etc Poultry Eggs	42 96 15 10	7 5 2 1	6 75 1		. 09 . 21 . 03 . 02	. 02 . 01 . 01	.01		
Butter	. 17 968	34	14 40	50	. 04 2. 14	. 07	. 03	.11	
Total animal food	1, 148	49	137	50	2. 53	.11	.30	.11	. 123
Cereals, sugars, starches	645 17	48	11	504 4	1.42	. 11	. 02	1.11	
Total vegetable food.	662	48	11	508	1.46	.11	. 02	1.11	. 04
Total food	1,810	97	148	558	3.99	. 22	. 32	1, 22	. 16
PERCENTAGES OF TOTAL FOOD. Beef, veal, and mutton Pork, lard, etc	Per ct. 2. 4 5. 3	Per ct. 6.8 4.7	Per ct. 3.8 50.8	Per ct.					Per ct. 6. 8
Poultry	5. 5 . 8 . 6 . 9 53. 5	2.3 1.4 .2 34.9	50. 8 . 7 . 6 9. 4 27. 5	9.0					1. (1. (4. 4 50. (
Total animal food	63.5	50.3	92.8	9.0					72. 9
Cereals, sugars, starches Fruits	35. 6 . 9	49.5	7.1	90.3					25. 8 1. 8
Total vegetable food.	36. 5	49. 7	7.2	91. 0					27.
Total food	100.0	100.0	100.0	100.0					100.0

Table 6.—Nutrients and potential energy in food purchased in dietary No. 98.

			Fuel		
Kind of food material.	Cost.	Protein.	Protein. Fat.		Fuel value.
FOR FAMILY, 14 DAYS. Food purchased: Animal. Vegetable.	\$7. 22 2. 69	Grams. 2, 885 2, 850	Grams. 8, 091 631	Grams. 2, 971 29, 948	Calories. 99, 269 140, 340
Total	9, 91	5, 735	8,722	32, 919	239, 600
FOR MAN PER DAY. Food purchased: Animal. Vegetable Total.	$\begin{array}{c} .12\frac{1}{4} \\ .04\frac{1}{2} \\ \hline .16\frac{3}{4} \end{array}$	48	137 11 148	50 508 558	1, 680 2, 380 4, 060
PERCENTAGES OF TOTAL FOOD PURCHASED. Food purchased: Animal. Vegetable.	72.9	Per cent. 50.3 49.7	Per cent. 92. 8 7. 2	Per cent. 9.0 91.0	Per cent. 41. 4 58. 6
Total	100.0	100.0	100.0	100.0	100.0

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 99).

The study began April 25, 1895, and continued fourteen days.

The members of the family and number of meals taken were as follows:

No	Meals.
Man about 55 years old	
alent to.	
Boy about 17 years old (42 meals × 0.8 meal of man), equivalent to.	
Boy about 16 years old (42 meals × 0.8 meal of man), equivalent to.	. 34
Total number of meals	. 144

Equivalent to one man for forty-eight days.

Remarks.—This family lived some 2 miles from Tuskegee, and consisted of the husband and wife, about 55 years old, both former slaves, and two boys, aged 17 and 16 years, respectively. One son was learning a trade at the Tuskegee Institute and the other helped on the farm and attended the night school. The man rented about 80 acres of the ordinary "pine land" of the region. The house and farm were remarkably well cared for in comparison with others outside the village (Pl. I, fig. 2). The house, formerly that of a small planter, had five plastered rooms, two of which were rented to a son-in-law. Of their three rooms the family used two as bedrooms and one as a kitchen. In the latter room was a rack about 8 feet high. On this were hung the "sides" of pork which they had slaughtered and salted the previous fall. They had a hogshead of molasses, a barrel of wheat flour, and one of corn meal. All the pork, molasses, and corn used were raised and prepared by the husband. The kitchen was furnished with a small portable cupboard, a pine table, and a few chairs. An iron pot in the fireplace and a frying pan made up the list of cooking utensils. A few plates and other dishes, with knives, forks, and spoons, sufficed for the table, which was without a cloth. The cooking was done in the fireplace, where the bread was baked without yeast or baking powder, and the meat (salt pork) was fried.

In the rear of the house were a barn, a shed, and a small garden.

The live stock consisted of a mule, cows, pigs, and hens. The cows furnished the family with plenty of butter and buttermilk.

The larger part of the farm was devoted to cotton. This, with corn, sugar cane, sorghum, and a few sweet potatoes, made the list of crops. The crops were not mortgaged. The farmer, despite his advanced age, was the most thrifty and progressive man of his class observed in the region.

The wife worked in the field during the busy season.

Table 7.—Food materials in dietary No. 99.

Composition.					Weight used.				
Kind of food material.	Dan		Carbo-	Total	Total food		Nutrient	ts.	
	tein.	Protein. Fat.		0000	mate-	Pro- tein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD. Unsmoked side bacon ¹ Eggs ¹ Milk ² Butter ¹	Per ct. 8.0 13.2 2.6 1.2	Per ct. 63. 2 9. 3 3. 1 82. 4	Per cent.	\$0.74 .04 7.07 .09	Grams. 4, 775 245 80, 220 200	Grams. 382 32 2, 086 2	Grams. 3, 018 23 2, 486 165	Grams. 3, 129	
Total animal food				7. 94	85, 440	2,502	5, 692	3, 129	
Cereals, sugar, etc.: Wheat Hour¹ Corn meal¹ Sugar. Molasses¹	9. 9 7. 3	4.1	77. 7 66. 7 100. 0 68. 3	1. 16 . 06 . 05 . 26	17, 480 2, 245 385 2, 645	1, 731 164 34	157 92	13, 582 1, 497 385 1, 807	
Total vegetable food	•••••	•••••		1.53	22, 755	1,929	252	17, 271	
Total food				9. 47	108, 195	4, 431	5, 944	20, 400	

Table 8.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 99.

								111	
	Food	1	Nutrient	8.	Food Nutrients.				
Kind of food material.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 14 DAYS. Pork, lard, etc	Grams. 4,775 245 200 80,220	Grams. 382 32 2 2, 086	Grams. 3,018 23 165 2,486	Grams.	Lbs. 10.50 .50 .50 .76.90	Lbs. 0.80 .10	Lbs. 6.70 .40 5.50	Lbs.	\$0.74 .04 .09 7.07
Total animal food	85, 440	2, 502	5, 692	3, 129	188.40	5.50	12.60	6. 90	7.94
Cereals, sugars, starches	22, 755	1, 929	252	17, 271	50, 20	4.30	. 50	38.10	1. 53
Total vegetable food.	22, 755	1, 929	252	17, 271	50.20	4.30	. 50	32, 10	1.53
Total food	108, 195	4,431	5,944	20, 400	238.60	9, 80	13.10	45, 00	9.47
PER MAN PER DAY. Pork, lard, etc	99 5 4 1, 672	8 1 43	63 1 3 52	65	.22 .01 .01 3.68	. 02	.14	. 14	
Total animal food	1,780	52	119	65	3.92	. 11	. 26	.14	. 16½
Cereals, sugars, starches	474	40	5	360	1.05	. 09	.01	. 80	
Total vegetable food.	474	40	5	360	1.05	. 09	. 01	. 80	. 031
Total food	2, 254	92	124	425	4. 97	. 20	. 27	. 94	. 193
PERCENTAGES OF TOTAL FOOD. Pork, lard, etc. Eggs. Butter. Milk	Per ct. 4.4 .2 .2 74.2	Per ct. 8.7 .7 47.1	Per ct. 50.8 .4 2.8 41.8	Per ct.					Per ct. 7.8 .4 .9 74.7
Total animal food	79. 0	56. 5	95. 8	15. 3					83. 8
Cereals, sugars, starches	21.0	43.5	4.2	84.7					16. 2
Total vegetable food.	21.0	43.5	4.2	84. 7					16. 2
Total food	100.0	100.0	100.0	100.0					100.0

¹ Average of analyses of similar Alabama foods.

² Fat only determined; protein and carbohydrates calculated as bearing corresponding ratio to average milk.

Table 9.- Nutrients and potential energy in food purchased in dietary No. 99.

			Froi		
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	Fuel value.
FOR FAMILY, 14 DAYS.					
Food purchased: Animal. Vegetable.	\$7.94 1.53	Grams. 2, 502 1, 929	Grams. 5, 692 252	Grams. 3, 129 17, 271	Calories. 76, 020 81, 060
Total	9.47	4, 431	5, 944	20, 400	157, 080
PER MAN PER DAY.					
Food purchased: Animal. Vegetable	. 16 <u>1</u> . 03 <u>1</u>	52 40	119	65 360	1, 585 1, 685
Total	. 193	92	124	425	3, 270
PERCENTAGES OF TOTAL FOOD PURCHASED.					
Food purchased: Animal. Vegetable.	83, 8	56. 5	Per cent. 95. 8 4. 2	Per cent. 15. 3 84. 7	Per cent. 48.4 51.6
Total	100.0	100, 0	100.0	100.0	100.00

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 100).

The study began April 25, 1895, and continued fourteen days.

The members of the family and number of meals taken were as follows:

Mea	ls.
Man about 35 years old	42
Woman about 35 years old (42 meals × 0.8 meal of man) equivalent	
to	34
Child 11 years old (42 meals × 0.6 meal of man) equivalent to	25
Child 7 years old (42 meals × 0.5 meal of man) equivalent to	21
Child 4 years old (42 meals × 0.4 meal of man) equivalent to	17
Two children under 2 years of age (84 meals × 0.3 meal of man)	
equivalent to	25
Man visitor	14
Total number of meals	78

Equivalent to one man for fifty-nine days.

Remarks.—This family was composed of husband and wife and five children. The cabin was built of logs and had two rooms (Pl. I, fig. 3). One, used as living and sleeping room, contained two beds and a few small pieces of furniture. The kitchen was provided with a pine table, one or two chairs, a small portable cupboard, the usual pot and frying pan, and a few dishes for the table. There was no churn, as the family had no cow. In the cupboard were a piece of salt pork and a jug of molasses, and near by a sack of corn meal. The provisions were purchased each week, and toward the close there was very little left in the house. Fried pork and corn pone, cooked in the fireplace, composed the daily diet.

A mule, an ox, and a pig made up the live stock.

The farm was planted chiefly to cotton. A small patch was devoted to sugar cane. There was no garden, and the cotton was cultivated close up to the cabin door.

This farmer had been in the habit of mortgaging his crops each year,

but under the influence of the Institute and the farmers' conferences he was trying to better his condition and was working this year without a mortgage.

Table 10.—Food materials in dietary No. 100.

	(Composit	tion.		Weight used.				
Kind of food material.				Total cost.	Total	Nutrients.			
	Pro- tein.	Fat.	Carbo- hydrates.		food mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD.	D (D	D						
Unsmoked side bacon 1Lard 1	Per ct. 8. 0 . 3	63. 2	Per cent.	\$0, 25 . 24	1, 590 1, 445	127 4	1,005	Grams.	
Total animal food				. 49	3, 035	131	2, 440		
VEGETABLE FOOD.									
Cereals, sugar, etc.: Wheat flour 1 Corn meal 1 Rice 1	9.6 7.3 7.5	.8 4.1 .4	78.3 66.7 79.3	. 63 . 58 . 08	9, 470 20, 920 710	909 1, 527 53	76 858 3	7, 415 13, 954 563	
Total cereals	2. 2	. 4	5.7	1.29 .01	31, 100 255	2,489	937	21, 932 15	
Total vegetable food				1.30	31, 355	2, 495	938	21, 947	
Total food				1. 79	34, 390	2, 626	3, 378	21, 947	

¹Average of analyses of similar Alabama foods.

Table 11.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 100.

	Nutrients.					N	utrient	s.	1
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 14 DAYS. Pork, lard, etc	Grams. 3, 035	Grams.	Grams. 2, 440	Grams.	Lbs. 6.70	Lbs. 0.30	Lbs. 5.40	Lbs.	\$0.49
Cereals, sugars, starches Vegetables	31, 100 255	2, 489	937 1	21, 932 15	68. 50 . 60	5. 50	2. 10	48. 40	1. 29 . 01
Total vegetable food.	31, 355	2, 495	938	21, 947	69. 10	5. 50	2. 10	48. 40	1.30
Total food	34, 390	2, 626	3, 378	21, 947	75. 80	5. 80	7.50	48.40	1.79
PER MAN PER DAY.									
Pork, lard, etc	51	2	41		. 11	. 01	.09		
Total animal food	51	2	41		. 11	.01	.09		. 003
Cereals, sugars, starches Vegetables	527 5	42	16	372	1. 16 . 01	.09	. 04	. 82	
Total vegetable food.	532	42	16	372	1. 17	. 09	.04	. 82	. 021
Total food	583	44	57	372	1. 28	. 10	. 13	. 82	. 03
PERCENTAGES OF TOTAL FOOD. Pork, lard, etc	Per ct. 8.8	Per ct. 5.0	Per ct. 72. 2	Per ct.					Per ct. 27. 4
Total animal food	8.8	5.0	72. 2						27.4
Cereals, sugars, starches Vegetables	90.4	94.8	27. 8	99.9					72. 1
Total vegetable food.	91. 2	95.0	27. 8	100.0					72.6
Total food	100.0	100.0	100.0	100.0					100.0

Table 12.—Nutrients and potential energy in food purchased in dietary No. 100.

			Fuel		
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	value.
FOR FAMILY, 14 DAYS.					
Food purchased: Animal. Vegetable.	\$0.49 1.30	Grams. 131 2,495	Grams. 2, 440 938	Grams. 21, 947	Calories. 23, 230 108, 930
Total	1. 79	2, 626	3, 378	21, 947	132, 160
PER MAN PER DAY.					
Food purchased: Animal. Vegetable.	. 003 . 021	2 42	41 16	372	395 1,845
Total	. 03	44	57	372	2, 240
PERCENTAGES OF TOTAL FOOD PURCHASED.					
Food purchased: Animal. Vegetable.	Per cent. 27. 4 72. 6	Per cent. 5. 0 95. 0	Per cent. 72. 2 27. 8	Per cent.	Per cent. 17. 6 82. 4
Total	100.0	100.0	100.0	100.0	100.0

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 101).

The study began April 26, 1895, and continued seven days.

The members of the family and number of meals taken were as follows:

	Meals.
Man about 60 years old	21
Woman about 55 years old (21 meals × 0.8 meal of man) equiva	a-
lent to	. 17
Two children between 10 and 14 years old (42 meals × 0.6 meal of	of
man)	. 25
Child between 6 and 10 years old (21 meals × 0.5 meal of mar	1)
equivalent to	. 11
Child 4 years old (21 meals × 0.4 meal of man) equivalent to	8
Man visitor	15

Total number of meals	. 97

Equivalent to one man for thirty-two days.

Remarks.—This family consisted of six persons—the husband, wife, and four children. A mortgage had caused them to be sold out the year previous, and they were now clearing up a new place on a piece of land which was more than a mile back from the traveled road, and of which only a part had previously been cultivated. The cabin, however, was better than the majority. It contained four rooms, and a small log hut in the yard served as a kitchen (Pl. II, fig. 1). The soil was sandy and very poor. The land was partly covered with pine trees, full of stumps and second growth. Cotton, cane, sweet potatoes, and cowpeas had been planted. The woman worked all day in the field.

The live stock consisted of a mule, two cows, and some hens. Milk and eggs were used, and occasionally the family indulged in the luxury of sugar and coffee. The provisions were purchased by the week. The cooking was done with a stove, and the diet was somewhat better than that in several other cabins where studies were made.



Fig. 1.—House of Negro Farmer's Family. (Dietary No. 101.)



Fig. 2.—House of Negro Sawmill Laborer. (Dietaries Nos. 102 and 131.)



Fig. 3.-House of Negro Cotton Plantation Laborer. (Dietary No. 103.)



All the possessions of the family were under mortgage, but their three oldest sons were working for the mortgagee to assist in payment. This accounts for their having such a good cabin after the previous year's reverses.

Table 13 .- Food materials in dietary No. 101.

	C	lomposit	ion.			Weig	ht used.	
Kind of food material.			~ .	Total	Total		Nutrien	ts.
	Pro- tein.	Fat.	Carbo- hydrates.	cost.	food mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.
ANIMAL FOOD. Pork: Bacon' Lard 1.	Per ct. 8.0	63. 2	Per cent.	\$0.52 .15	Grams. 2, 990 905	Grams. 239 3	Grams. 1,890 899	Grams.
Total pork and lard Eggs ¹ Butter ¹ Milk ² Buttermilk	13. 2 1. 2 3. 8 3. 0	9. 3 82. 4 4. 6 . 5	5. 7 4. 8	. 67 . 13 . 26 . 39 . 34	3, 895 640 595 4, 425 12, 460	242 84 7 168 374	2, 789 60 490 204 62	252 598
Total animal food				1.79	22, 015	875	3, 605	850
VEGETABLE FOOD. Cereals, sugar, etc.: Wheat flour 1 Corn meal 1 Sugar (C)			78. 3 66. 7 95. 0	. 56	8, 390 8, 280 905	805 604	67 339	6, 569 5, 523 860
Total vegetable food				. 89	17, 575	1,409	406	12, 952
Total food				2.68	39, 590	2, 284	4,011	13, 805

Table 14. - Weights and percentages of food materials and nutritive ingredients used in dietary No. 101.

	77. 1	N	utrients	š.	77		Nutrient	s.	
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 7 DAYS. Pork, lard, etc	Grams. 3, 895 640 595 4, 425 12, 460	Grams. 242 84 7 168 374	Grams. 2,789 60 490 204 62	Grams. 252 598	Lbs. 8.60 1.40 1.30 9.70 27.50	Lbs. 0.50 .20	Lbs. 6.20 .10 1.10 .50	Lbs.	\$0. 67 13 . 26 . 39 . 34
Total animal food	22, 015	875	3,605	850	48. 50	1.90	7.90	1.90	1.79
Cereals, sugars, starches Total vegetable food.		1,409 1,409	406 406	12, 952 12, 952	38. 80 38. 80	3. 10 3. 10	. 90	28. 50 28. 50	. 89
Total food	39, 590	2, 284	4. 011	13, 802	87.30	5, 00	8. 80	30. 40	2. 68
PER MAN PER DAY.									
Pork, lard, etc. Eggs Butter Milk Buttermilk	122 20 19 138 389	7 3 5 12	87 2 15 7 2	8 19	. 27 . 04 . 04 . 30 . 86	.02 .01	.19	. 02	
Total animal food	688	27	113	27	1.51	.06	. 24	.06	. 05½
Cereals, sugars, starches Total vegetable food.	549 549	44 44	13 13	405 405	1. 21 1. 21	.10	.03	. 89	. 023
Total food	1, 237	71	126	432	2.72	.16	. 27	. 95	. 081

Average of analyses of similar Alabama foods.
 Fat only determined; protein and carbohydrates calculated as bearing corresponding ratio to average milk.

Table 14.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 101—Continued.

	771 3	1	Sutrient	з.	771	1	Nutrient	s.	
Kind of food material. ma	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
PERCENTAGES OF TOTAL FOOD. Pork, lard, etc. Eggs. Butter Milk Buttermilk	Per ct. 9.8 1.6 1.5 11.2 31.5	Per ct. 10. 6 3. 7 . 3 7. 3 16. 4	Per ct. 69. 6 1. 5 12. 2 5. 1 1. 5	1. 9 4. 3					Per ct. 25. 0 4. 8 9. 7 14. 6 12. 7
Total animal food	55. 6	38. 3	89. 9	6. 2					66.8
Cereals, sugars, starches Total vegetable food.	. 44. 4	61. 7 61. 7	10. 1 10. 1	93. 8 93. 8					33, 2 33, 2
Total food	100.0	100.0	100.0	100.0					100.0

Table 15.—Nutrients and potential energy in food purchased in dietary No. 101.

			Nutrients		Fuel	
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	value.	
FOR FAMILY, 7 DAYS.						
Food purchased: Animal. Vegetable	\$1.79 .89	Grams. 875 1,409	Grams, 3, 605 406	Grams. 850 12, 952	Calories. 40, 600 62, 655	
Total	2.68	2, 284	4, 011	13, 802	103, 255	
PER MAN PER DAY.						
Food purchased: Animal Vegetable	$0.05\frac{1}{2}$ $0.02\frac{3}{4}$	27 44	113 13	27 405	1, 270 1, 960	
Total	. 081	71	126	432	3, 230	
PERCENTAGE; OF TOTAL FOOD PURCHASED.		THE PERSON NAMED AND DESCRIPTION OF THE PERSON NAMED IN COLUMN		-		
Food purchased: Animal. Vegetable	Per cent. 66. 8 33. 2	Per cent. 38.3 61.7	Per cent. 89. 9 10. 1	Per cent. 6. 2 93. 8	Per cent. 39, 3 60, 7	
Total	100.0	100.0	100.0	100.0	100.0	

DIETARY OF A NEGRO SAWMILL LABORER'S FAMILY IN ALABAMA (No. 102).

The study began April 27, 1895, and continued seven days.

The members of the family and number of meals taken were as follows:

Man about 26 years old.	feals.
Woman about 24 years old (21 meals × 0.8 meal of man) equiva	-
lent to	
Two children between 2 and 4 years old (42 meals \times 0.4 meal of man equivalent to	
Total number of meals	

Equivalent to one man for twenty-three days.

Remarks.—This family, living on a small farm, consisted of husband and wife, an adopted daughter of 12, and two younger children. The

husband worked in a sawmill and received 50 cents a day, paid in merchandise. The wife worked in the field. The husband was a stepson of the family mentioned in study No. 101. The two farms joined, and the people assisted one another in their farm work.

The cabin was made of logs and had one room, which served as living and sleeping room, and an addition in the rear, not more than 6 feet wide, which was used as a kitchen (Pl. II, fig. 2). The living room contained two beds, a few other small pieces of furniture, and a fireplace. The kitchen had a cupboard, a pine table, and a fireplace. The house had two doors, but was without windows. The cabin was comparatively new, and better than many of its class. The furnishings, however, were as poor as those of the ordinary one-room cabins.

The food consisted of salt pork, corn meal, and molasses, with butter, buttermilk, "clabber," and a few eggs. For live stock the people had an ox, a cow, and a few hens. They had no garden, the farm crops were like those of No. 101, cotton, with a little cane, cowpeas, and sweet potatoes.

Table 16.-Food materials in dietary No. 102.

	C	omposit	ion.			Weigh	ht used.		
Kind of food material.	D		Gardan I an	Total	Total food	Nutrients.			
	Pro- tein.	Fat.	Carbohy- drates.		mate- rial.	Pro- tein.	Fat.	Carbohy- drates.	
ANIMAL FOOD.	Per ct.	Per ct.	Per cent.		Grams.	Grams.	Grams.	Grams.	
Bacon 1	8.0	63. 2		\$0.29	1,630	130	1,030		
Eggs ¹	13. 2	9.3		. 07	425	56	40		
Butter 1		82.4		. 11	240	3	198		
Buttermilk 1		.5	4.8	. 92	1,815	54	9	87	
Milk 1	3.3	4.0	5.0	. 05	10, 435	344	417	522	
Total animal food				1.44	14, 545	587	1, 694	609	
VEGETABLE FOOD.									
Cereals, sugar, etc.:	1			(1					
Wheat flour 1	9, 6	.8	78.3	. 24	3, 645	350	29	2,854	
Corn meal 1	7.3	4, 1	66.7	.14	5, 100	372	209	3, 402	
Sugar (C)			95.0	.06	540			513	
Molasses 1	1.3	. 1	68.3	. 36	3, 670	47	4	2, 507	
Total vegetable food				.80	12, 955	769	242	9, 276	
Total food				2. 24	27, 500	1, 356	1,936	9, 885	

 $^{^{\}text{!}}\text{Average of analyses of similar Alabama foods.} \\ 12246\text{---No. } 38\text{-----3}$

Table 17.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 102.

*	Food	1	Nutrient	s.	Food	1	Sutrient	S	
Kind of food material.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	mate-	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 7 DAYS.									
Pork, lard, etc. Eggs. Butter Milk Buttermilk.	Grams. 1, 630 425 240 10, 435 1, 815	Grams. 130 56 3 344 54	Grams. 1,030 40 198 417 9	522 87	Lbs. 3.60 1.00 .50 23.00 4.00	Lbs. 0.30 .10 .80 .10	Lbs. 2.30 .10 .50 .90	1. 10 . 20	\$0. 29 . 07 . 11 . 92 . 05
Total animal food	14, 545	587	1, 694	609	32.10	1.30	3.80	1.30	1.44
Cereals, sugars. starches Total vegetable food.	12, 955 12, 955	769 769	242 242	9, 276 9, 276	28. 50 28. 50	1.70 1.70	.50	20.50 20.50	. 80
Total food	27, 500	1, 356	1, 936	9, 885	60. 60	3.00	4.30	21.80	2. 24
PER MAN PER DAY.									
Pork, lard, etc Eggs	71 18 10 454 79	6 3 15 2	45 2 9 18	23 3	.16 .04 .02 1.00 .17	.01 .01 .03 .01	.10	.05	. 061
Total animal food	632	26	74	26	1.39	.06	.16	.06	
Cereals, sugars, starches Total vegetable food.	563 563	33 33	11 11	403 403	1. 25 1. 25	.07	.02	.89	. 031
Total food	1, 195	59	85	429	2. 64	. 13	. 18	. 95	. 093
PERCENTAGES OF TOTAL FOOD. Pork lard, etc	Per ct. 5.9 1.5 .9 38.0 6.6	Per ct. 9.6 4.1 .2 25.4 4.0	Per ct. 53. 2 2. 1 10. 3 21. 5 . 4	Per ct.					Per ct. 13. 0 3. 1 4. 9 41. 1 2. 2
Total animal food	52. 9	43.3	87.5	6. 2					64. 3
Cereals, sugars, starches Total vegetable food.	47. 1 47. 1	56. 7 56. 7	12. 5 12. 5	93. 8 93. 8					35. 7 35. 7
Total food	100.0	100.0	100.0	100.0					100.0

Table 18.—Nutrients and potential energy in food purchased in dietary No. 102.

			Fuel	
Cost.	Protein.	Fat.	Carbo- hydrates.	value.
01 11	Grams.	Grams.		Calories. 20, 660
	769	242	9, 276	43, 435
2.24	1,356	1, 936	9, 885	64, 095
				900 1, 890
.002				
. 093	59	85	429	2, 790
	43. 3 56. 7	87.5 12.5	93. 8	32. 2 67. 8
100.0	100.0	100.0	100.0	100.0
	\$1.44 .80 2.24 .06½ .093 Per cent. 64.3 35.7	Protein. \$1.44	Protein. Fat. \$1.44 Grams. Grams. 1,694 242 2.24 1,356 1,936 .06\frac{1}{2} 26 74 .03\frac{1}{2} 33 11 .09\frac{1}{4} 59 85 Per cent. Per cent. 43.3 35.7 56.7 12.5	Protein. Fat. Carbo-hydrates. \$1.44

DIETARY OF A NEGRO COTTON PLANTATION LABORER'S FAMILY IN ALABAMA (No. 103).

The study began May 12, 1895, and continued fourteen days.

The members of the family and number of meals taken were as follows:

Man about 30 years old. Meals. 42
Woman about 80 years old (42 meals × 0.8 meal of man) equivalent to
Woman about 40 years old (42 meals × 0.8 meal of man) equivalent
to
Child 14 years old (42 meals × 0.7 meal of man) equivalent to
Child 1 year old (42 meals × 0.3 meal of man) equivalent to
Total number of meals

Equivalent to one man for sixty-seven days.

Remarks.—This family consisted of the husband, wife, another woman quite old, and four children.

They occupied a log cabin of two rooms on a plantation of 1,200 acres, 8 miles from the village (Pl. II, fig. 3). The plantation was divided into small farms averaging 40 acres, and rented to some thirty families. This family bought their supplies from the proprietor, and gave him as security a mortgage on their crops. The provisions, instead of being purchased by the week, as was so commonly done, were bought in larger quantities once in four or six weeks, and stored in a log hut close by the house. The provender for the mules was likewise bought in quantity. With the exception of a small vegetable garden of collards, the farm was planted entirely with cotton.

The live stock consisted of two mules and three hogs.

Table 19 .- Food materials in dietary No. 103.

	C	omposit	ion.		Weight used.				
Kind of food material.	Desc		Ok	Total	Total food	Nutrients.			
	Pro- tein.	Fat.	Carbo- hydrates.	0,31.	mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD. Bacon 1	Per ct. 8.0		Per cent.	\$4. 87	Grams. 27, 615		Grams. 17, 453	Grams.	
Total animal food				4. 87	27, 615	2, 209	17, 453		
VEGETABLE FOOD.									
Cereals, sugar, etc.: Corn meal ¹ Wheat flour ¹ Molasses ¹	7.3 9.6 1.3	4.1 .8 .1	66. 7 78. 3 68. 3	. 97 . 90 1. 49	32, 590 14, 740 14, 970	2, 379 1, 415 195	1, 336 118 15	21, 738 11, 541 10, 224	
Total vegetable food				3.36	62, 300	3, 989	1,469	43, 503	
Total food				8, 23	89, 915	6, 198	18, 922	43, 503	

¹ Average of analyses of similar Alabama foods.

Table 20.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 103.

	Food	1	Nutrient	s	Food	N	utrients	3.		
Kind of food material.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.	
FOR FAMILY, 14 DAYS. Pork, lard, etc	Grams. 27, 615 62, 300 89, 915	Grams. 2, 209 3, 989 6, 198	Grams. 17, 453 1, 469 18, 922	Grams 43, 503 43, 503	Lbs. 60. 90 137. 30	Lbs. 4. 90 8. 80	Lbs. 38.50 3.20	Lbs. 95. 90	\$4.87 3.36 8.23	
PER MAN PER DAY. Pork, lard, etc	412 930	33 60	261 22	649	. 91 2. 05	.07	. 57	1.43	. 074	
Total food	1, 342	93	283	649	2.96	. 20	. 62	1.43	. 124	
PERCENTAGES OF TOTAL FOOD. Pork, lard, etc	Per ct. 30.7 69.3	Per ct. 35. 6 64. 4	Per ct. 92.3	Per ct.					Per ct. 59. 2 40. 8	
Total food	100.0	100.0	100.0	100.0					100.0	

Table 21.—Nutrients and potential energy in food purchased in dietary No. 103.

			Nutrients		Fuel	
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	value.	
FOR FAMILY, 14 DAYS.						
Food purchased: Animal. Vegetable.	\$4. 87 3. 36	Grams. 2, 209 3, 989	Grams. 17, 453 1, 469	Grams. 43, 503	Calories. 171, 370 208, 380	
Total	8. 23	6, 198	18, 922	43, 503	379, 750	
PER MAN PER DAY.						
Food purchased: Animal. Vegetable.	. 07½ . 05	33 60	261 22	649	2, 560 3, 110	
Total	. 121	93	283	649	5, 670	
PERCENTAGES OF TOTAL FOOD PURCHASED.						
Food purchased: Animal. Vegetable.	Per cent. 59. 2 40. 8	Per cent. 35. 6 64. 4	Per cent. 92. 3 7. 7	Per cent.	Per cent. 45, 1 54, 9	
Total	100.0	100.0	100.0	100.0	100.0	

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HETARY OF A NEGRO COTTON PLANTATION LABORER'S FAMILY IN (No. 104).	T ALABA
The study began May 12, 1895 and continued fourteen days.	
The members of the family and number of meals taken were as follow	7S:
	Meals.
Man about 45 years old	42
Man 22 years old	42
Woman about 50 years old (42 meals × 0.8 meal of man) equiv	a-
lent to	
Girl 16 years old (42 meals \times 0.7 meal of man) equivalent to	29
Total number of meals	147
Equivalent to one man for forty-nine days.	

Remarks.—This family was composed of husband, wife, and two grown children. They lived on the same plantation as the family in dietary No. 103 and their condition was very similar. They, however, purchased their provisions in small quantities by the week. The cabin was situated on the bank of a creek bordering a swamp, and a cupboard, meal barrel, a few chairs, a pine table, and two beds furnished the house.

Their live stock consisted of one mule and a pig. The farm was planted entirely to cotton. All the women worked in the field.

Table 22.-Food materials in dietary No. 104.

		C	ompositi	on.	Į.	Weight used.				
	Kind of food material.	T)		~ ;	Total	Total	Nutrients.			
		Pro- tein.	Fat.	Carbo- hydrates:	cost.	food mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.	
	ANIMAL FOOD.	Per ct.	Pay at	Per cent.		rams.		G	Grams.	
Bac	on 1	8.0			\$3.16	17, 915		Grams. 11, 322	Grams.	
	Total animal food				3. 16	17, 915	1, 433	11, 322		
	VEGETABLE FOOD.									
	eals, sugar, etc.: Corn meal ¹ Wheat flour ¹ Molasses ¹	7.3 9.6 1.3	4. 1 . 8 . 1	66. 7 78. 3 68. 3	1. 26 . 58 . 54	21, 005 19, 050 5, 430	1, 533 1, 829 71	861 152 5	14, 010 14, 916 3, 709	
	Total vegetable food				2.38	45, 485	3, 433	1.018	32, 635	
	Total food				5. 54	63, 400	4, 866	12, 340	32, 635	

¹ Average of analyses of similar Alabama foods.

Table 23.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 104.

	Food	N	utrients	3.	Food	7	Kutrient	s.	
Kind of food material.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 14 DAYS. Pork, lard, etc Cereals, sugars, starches	Grams. 17, 915 45, 485	Grams. 1, 433 3, 433	Grams. 11, 322 1, 018	Grams. 32, 635	<i>Lbs</i> . 39. 50 100. 30	Lbs. 3. 10 7. 60	Lbs. 25. 00 2. 20	Lbs. 72.00	\$3. 16 2. 38
Total food	63, 400	4,866	12, 340	32, 635	139.80	10.70	27. 20	72.00	5. 54
PER MAN PER DAY.									
Pork, lard, etc	366 928	29 70	231 21	666	. 81 2. 04	.06	. 51 . 05	1.47	$06\frac{1}{2}$ $04\frac{3}{4}$
Total food	1, 294	99	252	666	2.85	. 21	. 56	1. 47	. 114
PERCENTAGES OF TOTAL POOD. Pork, lard, etc Cereals, sugars, starches	Per ct. 28.3 71.7	Per ct. 29.4 70.6	Per ct. 91.8 8.2	Per ct.					Per ct. 57.0 43.0
Total food	100.0	100.0	100.0	100.0					100.0

Table 24.—Nutrients and potential energy in food purchased in dietary No. 104.

			Nutrients		Fuel	
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	value.	
for family, 14 days.						
Food purchased: Animal Vegetable	\$3.16 2.38	Grams. 1, 433 3, 433	Grams. 11, 322 1, 018	Grams. 32, 635	Calories. 111, 170 157, 345	
Total	5. 54	4, 866	12, 340	32, 635	268, 515	
PER MAN PER DAY.						
Food purchased: Animal Vegetable	.06½ .04¾	29 70	231 21	666	2, 270 3, 210	
Total	. 111	99	252	666	5, 480	
PERCENTAGES OF TOTAL FOOD PURCHASED.						
Food purchased: Animal Vegetable	Per cent. 57. 0 43. 0	Per cent. 29.5 70.5	Per cent. 91. 8 8. 2	Per cent.	Per cent. 41.4 58.6	
Total	100.0	100.0	100.0	100.0	100.0	

DIETARY OF A NEGRO FARM MANAGER'S FAMILY IN ALABAMA (No. 105).

The study began June 10, 1895, and continued ten days.

The members of the family and number of meals taken were as follows:

Σ	feals.
Man about 44 years old	30
Woman 22 years old (30 meals × 0.8 meal of man) equivalent to	24
Woman 22 years old (30 meals × 0.8 meal of man) equivalent to	24
Woman 23 years old (30 meals × 0.8 meal of man) equivalent to	24
Boy 13 years old (30 meals × 0.7 meal of man) equivalent to	21

Remarks.—This family consisted of a husband, wife, two women, one a niece of the family and the other a visitor, and a boy. They lived on the Tuskegee Institute farm, of which the husband was manager, in a five-room cottage. Their home was furnished in modern style, simply yet neatly. The wife was one of the teachers in the Institute. The niece, 22 years old, assisted in housework; the boy attended school and did chores around the house; the visitor was a dressmaker. The cooking was plain. Plenty of oil and fat was used in the preparation of their food, as is the case in nearly all Southern cooking.

Table 25 .- Food materials in dietary No. 105.

	C	omposit	ion.			Weig	ght used.	
Kind of food material.	Pro-		Carbo-	Total	Total food		Nutrien	ts.
	tein.	Fat.	hydrates.	Contr	mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.
ANIMAL FOOD.	D	T	D .		~	~	~	
Beef, round steak 1	Per ct. 19. 4	Per ct. 5. 2	Per cent.	\$0.18	795	Grams. 154	Grams.	Grams.
Bacon 1. Lard 1.	8. 0 . 3	63. 2 99. 3		. 59 . 47	3, 345 2, 835	268 9	2, 114 2, 815	
Total. Poultry, chicken¹ Egus ' Butter '	14. 7 13. 2 1. 2	6.5 9.3 82.4		1.06 .12 .11 .20	6, 180 1, 105 595 455	277 162 79 5	4, 929 72 55 375	
Milk. Buttermilk ¹	3. 3 3. 0	4.0	5. 0 4. 8	.04	480 4, 875	16 146	19 24	24 234
Total animal food				1.84	14, 485	839	5. 515	258
VEGETABLE FOOD.								
Cereals, sugar, etc.: Flour, wheat Molasses	9. 6 1. 3	.8	78.3 68.3	.60	9, 070 2, 720	871 35	73 3	7, 102 1, 858
Total				. 87	11, 790	906	76	8, 960
Vegetables: Beans, string Beets Cabbage Corn, green Okra. Onions. Tomatoes	2. 2 1. 6 2. 1 2. 8 2. 0 1. 7 . 8	. 4 . 1 . 4 1. 1 . 4 . 4	9. 4 9. 6 5. 8 14. 1 9. 5 9. 9	. 03 . 22 . 70 . 05 . 05	1, 190 1, 955 6, 350 1, 020 115 935 795	26 31 133 29 2 16 6	5 2 25 11 5 4	112 188 368 144 11 93
Total				1.07	12, 360	243	55	917
Fruits, nuts, etc.: Blackberries Peaches	.9	2. 1	7. 5 13. 4	.06	1, 360 1, 305	12 14	29	102 175
				. 08	2, 665	26	29	277
Total vegetable food				2.02	26, 815	1, 175	160	10, 184
Total food				3.86	41, 300	2, 014	5, 675	10, 442

Average of analyses of similar Alabama foods.

Table 26.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 105.

	Food	2	Nutrients	3.	Food	2	Nutrient	s.	
Kind of food material.	mate- rial.	Pro- tein.	Fat.	Carbo hy- drates.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 10 DAYS.									
			Grams.	Grams.	Lbs.	Lbs.	Lbs.	Lbs.	
Beef. veal, and mutton		154	41		1.80	0.30	0.10		\$0.18
Pork, lard, etc		277	4, 929		13.60	60	10.80		1.06
Poultry		162 79	72 55		2.40 1.30	. 40	. 10		.11
Eggs Butter	455	5	375		1.00	. 20	. 80		.20
Milk	480	16	19	24	1.10	.10	.10	0.10	.04
Buttermilk	4, 875	146	24	234	10.70	.30		. 50	. 13
Total animal food	14, 485	839	5, 515	258	31.90	1.90	12.10	. 60	1.84
Cereals, sugars, starches	11, 790	906	76	8, 960	26, 00	2,00	. 20	12, 80	. 87
Vegetables	12, 750	243	55	947	27, 20	. 50	.10	2, 10	1.07
Fruits		26	29	277	5. 90	.10	.10	. 60	. 03
Total vegetable food.	26, 815	1, 175	160	10.184	59. 10	2. 60	.40	22.50	2.02
Total food	41, 300	2. 014	5. 675	10, 442	91.00	4.50	12.50	23.10	3.86

Table 26.—Weights and percentages of food materias and nutritive ingredients used in dietary No. 105—Continued.

:	777	N	utrients	١.	737	2	utrients	3.	
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
PER MAN PER DAY. Beef, veal, and mutton Pork, lard, etc Poultry Eggs Butter Milk Buttermilk.	Grams. 19 151 27 14 11 12 119	Grams. 4 7 4 2 2 3	Grams. 1 120 2 1 9	Grams.	Lbs. 0.04 .34 .06 .03 .02 .03 .26	Lbs. 0.01 .02 .01	Lbs. 0. 27	Lbs.	
Total animal food	353	20	134	6	. 78	. 05	. 29	.01	\$0.041
Cereals, sugars, starches Vegetables Fruits	288 301 65	22 6 1	2 1 1	219 23 7	. 63 . 67 . 14	. 05	. 01	. 48 . 06 . 01	
Total vegetable food.	654	29	4	249	1.44	. 06	. 01	. 55	. 05
Total food	1,007	49	138	255	2. 22	. 11	. 30	. 56	. 09½
PERCENTAGES OF TOTAL FOOD. Beef, veal, and mutton Pork, lard, etc. Poultry Eggs. Butter Milk Buttermilk	Per ct. 1.9 15.0 2.7 1.4 1.1 1.2 11.8	Per ct. 7.7 13.8 8.0 3.9 .2 .8 7.3	Per ct. 0.7 86.9 1.3 1.0 6.6 .3 .4	Per ct.					Per ct. 4.7 27.5 3.1 2.8 5.2 1.0 3.4
Total animal food	35. 1	41.7	97. 2	2.4					47. 7
Cereals, sugars, starches Vegetables Fruits	28. 6 29. 9 6. 4	45. 0 12. 0 1. 3	1. 3 1. 0 . 5	85. 8 9. 1 2. 7					22. 5 27. 7 2. 1
Total vegetable food.	64. 9	58. 3	2. 8	97. 6					52.3
Total food	100.0	100.0	100.0	100.0					100.0

Table 27.—Nutrients and potential energy in food purchased in dietary No. 105.

			Nutrients			
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	Fuel value.	
FOR FAMILY, 10 DAYS.						
Food purchased: Animal. Vegetable	\$1.84 2.02	Grams. 839 1, 175	Grams. 5, 515 160	Grams. 258 10, 184	Calories. 55, 790 48, 060	
Total	3, 86	2, 014	5, 675	10, 442	103, 850	
PER MAN PER DAY.						
Food purchased: Animal. Vegetable.		20 29	134 4	6 249	1, 360 1, 175	
Total	. 091	49	138	255	2, 535	
PERCENTAGES OF TOTAL FOOD PURCHASED.		======				
Food purchased: Animal. Vegetable.	47.7	Per cent. 41. 7 58. 3		Per cent. 2.4 97.6	Per cent. 53, 6 46, 4	
Total	100.0	100.0	100.0	100.0	100.0	

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 130).

The study began December 8, 1895, and continued twelve days.

The members of the family and number of meals taken were as follows:

	,		Meals.
Man 35 years old			36
Woman 35 years old (36 meals × 0.8 m	eal of man) e	quivalent t	o 29
Boy 12 years old (36 meals × 0.6 meal	of man) equi	valent to	22
Child about 8 years old (36 meals × 0.3	meal of man	ı) equivaler	nt to. 18
Child about 6 years old (36 meals \times 0.5	meal of man	a) equivaler	nt to. 18
Child about 3 years old (36 meals × 0.4	meal of man	ı) equivaler	nt to. 14
Infant (36 meals × 0.3 meal of man) ea	quivalent to.		11

Remarks.—This was a winter dietary of the same family as No. 100. The same typical foods were used as in the spring with the addition of sweet potatoes. The latter were cooked by roasting in hot ashes.

Table 28.—Food materials in dietary No. 130.

	C	Composit	ion.		Weight used.				
Kind of food material.	Pro-	Fat.	Carbo hydrates.	Total cost.	Total	Nutrients.			
	tein.				mate-	Pro- tein.	Fat.	Carbo- bydrates.	
ANIMAL FOOD. Pork: Bacon¹ Lard	Per ct. 7.5	66.1	Per ct.	\$0.32 .15	1,815	Grams.	1, 200	Grams.	
Total animal food				. 47	2,720	136	2, 105		
VEGETABLE FOOD. Corn meal	7. 5 1. 0 1. 5	4. 2 . 1 . 6	65. 9 71. 8 23. 1	. 45 . 50 . 34	16, 330 4, 990 20, 310	1, 225 50 305	686 5 122	10, 761 3, 583 4, 691	
Total vegetable foed				1. 29	41, 630	1,580	813	19,05	
Total food				1.76	44, 350	1,716	2, 918	19, 035	

¹Average of analyses of similar Alabama foods.

Table 29.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 130.

	Food	2	Vutrients	s.	T 3	2	Vutrient	8.	
Kind of food material.	mate-	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 12 DAYS. Pork, lard, etc	Grams. 2, 720	Grams. 136		Grams.	Lbs. 6, 00	Lbs. 0.30	Lbs. 4.60	Lbs.	\$0.47
Total animal food	2,720	136	2, 105		6.00	.30	4.60		. 47
Cereals, sugars, starches Vegetables	21, 320 20, 310	1, 275 305	691 122	14, 344 4, 691	47. 00 44. 80	2.89 .70	1.50 .30	31, 60 10, 40	. 95
Total vegetable food.	41,630	1,580	813	19, 035	91.80	3.50	1.80	42.00	1. 29
Total food	44, 350	1,716	2, 918	19,035	97.80	3.80	6. 40	42.00	1.76
PER MAN PER DAY.									
Pork, lard, etc	56	3	43		. 12	.01	. 09		
Total animal food	56	3	43		. 12	. 01	. 09		. 01
Cereals, sugars, starches Vegetables		26 6	14	293 96	. 96	.06	.03	. 65	
Total vegetable food.	849	32	17	389	1.87	. 07	. 04	. 86	. 021
Total food	905	35	60	389	1.99	. 08	. 13	86	. 03½

Table 29.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 130—Continued.

	Trad	Food Nutrients.			773	1	Nutrient	s		
Kind of food material.		Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Protein.	Fat.	Carbo- hy- drates.	Cost.	
PERCENTAGES OF TOTAL FOOD. Pork, lard, etc	Per ct. 6. 1	$P\epsilon r\ ct.$ 7.9	Per ct. 72.1	Per ct.					Per ct.	
Total animal food	6. 1	7.9	72. 1						26. 7	
Cereals, sugars, starches Vegetables	48. 1 45. 8	74. 3 _17. 8	23.7 4.2	75.4 24.6					54. 0 19. 3	
Total vegetable food.	93.9	92.1	27.9	100.0					73.3	
Total food	100.0	100.0	100.0	100.0					100.0	

Table 30.—Nutrients and potential energy in food purchased in dietary No. 130.

			Nutrients.		77. 1
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	Fuel value.
FOR FAMILY, 12 DAYS. Food purchased: Animal Vegetable	\$0.47 1.29	Grams. 136 1, 580	Grams. 2, 105 813	Grams.	Calories. 20, 130 92, 080
Total	1.76	1,716	2,918	19, 035	112, 210
FOOD purchased: Animal. Vegetable. Total. PERCENTAGES OF TOTAL FOOD PURCHASED.	.01	3 32 35	43 17 60	389	410 1,885 2,295
Food purchased: Animal. Vegetable. Total.	Per cent. 26. 7 73. 3 100. 0	7.9	Per cent. 72.1 27.9 100.0	Per cent. 100. 0 100. 0	Per cent. 17. 9 82. 1 100. 0

DIETARY OF A NEGRO SAWMILL LABORER'S FAMILY IN ALABAMA (No. 131).

The study began December 8, 1895, and continued twelve days (2 meals per day). The members of the family and number of meals taken were as follows:

Meal	ls.
Man about 26 years old	4
Woman about 25 years old (24 meals × 0.8 meal of man) equiva-	
lent to	9
Woman about 48 years old (24 meals × 0.8 meal of man) equiva-	
lent to	9
Child about 4 years old (24 meals × 0.4 meal of man) equivalent to 1	.0
Child about 2 years old (24 meals × 0.3 meal of man) equivalent to	7
Total number of meals 7	9

Equivalent to one man for forty days.

Remarks.—This was a winter dietary of the same family as No. 102. The only change in the dietary was in the use of cowpeas. The husband worked as usual in the sawmill while the wife spent her time sewing.

Table 31.—Food materials in dietary No. 13..

	C	omposit	ion.			Weig	ht used.		
Kind of food material.	Pro-		Carbo-	Total cost.	Total food	Nutrients.			
	tein.	Fat.	hydrates.		mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD. Pork: Bacon' Lard Butter'	Per ct. 7.5	Per ct. 66, 1 100, 0 82, 4	Per ct.	\$0.72 .19 .30	Grams. 4, 080 1, 135 680	Grams. 306	2, 697 1, 135	Grams.	
				1. 21	5,895	314	4, 392		
Corn meal ¹ Flour ¹ Sugar (C)CowpeasSweet potatoes		4. 2 . 9 6	65. 9 78. 3 95. 0 61. 3 23. 1	.90 .10 .12 .05	3, 630 13, 620 1, 050 1, 815 2, 130	272 1,308 392 39	153 123 25 13	2, 392 10, 664 998 1, 113 419	
Total vegetable food				1. 21	22, 245	2, 011	314	15,586	
Total food				2.42	28, 140	2, 325	4, 70€	15, 586	

¹ Average of analyses of similar Alabama foods.

Table 32.—Weights and percentages of food materials and nutritive ingredients used in Dietary No. 131.

		1	Nutrient	s.		1	Nutrient	s.	
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 12 DAYS. Pork, lard, etc Butter	Grams. 5, 215 680	Grams. 306 8	Grams. 3, 832 560	Grams.	Lbs. 11.50 1.50	Lbs. 0.70	Lbs. 8.50 1.20	Lbs.	\$0.91 .30
Total animal food	5, 895	314	4, 392		13. 00	.70	9.70		. 1.21
Cereals, sugars, starches Vegetables	18, 300 3, 945	1, 580 431	276 38	14, 054 1, 532	40.30 8.70	3.50 .90	. 60	31. 00 3. 40	1. 12 . 09
Total vegetable food.	22, 245	2,011	314	15, 586	49.00	4.40	.70	34.40	1. 21
Total food	28, 140	2, 325	4, 706	15, 586	62. 00	5.10	10.40	34.40	2.42
PER MAN PER DAY.									
Pork, lard, etcButter	130 17	8	96 14		. 28	.02	. 21		
Total animal food	147	8	110		. 32	.02	. 24		. 03
Cereals, sugars, starches Vegetables	457 99	39 11	7	351 39	1.01 .22	.09	, 02	.77	
Total vegetable food.	556	50	8	390	1. 23	. 11	.02	. 86	. 03
Total food	703	58	118	390	1. 55	. 13	. 26	. 86	. 06
PERCENTAGES OF TOTAL FOOD. Pork, lard, etc	Per ct. 18.5 2.4	Per ct. 13. 2 . 3	Per ct. 81. 4 11. 9	Per ct.					Per ct. 37.6 12.4
Total animal food	20.9	13.5	93.3						50.0
Cereals, sugars, starches Vegetables	65. 1 - 14. 0	68. 0 18. 5	5. 9	90. 2					46. 3 3. 7
Total vegetable food.	79. 1	86. 5	6. 7	100.0					50.0
Total food	100.0	100.0	100.0	100.0					100.0

Table 33 .- Nutrients and potential energy in food purchased in dietary No. 131.

			Nutrients		77. 1
Kind of food material.	Cost.	Protein.	· Fat.	Carbo- hydrates.	Fuel value.
FOR FAMILY, 12 DAYS.					
Food purchased: Animal Vegetable	\$1.21 1.21	Grams. 314 2, 011	Grams. 4,392 314	Grams. 15, 586	Calories. 42, 135 75, 065
Total	2. 42	2, 325	4,706	15, 586	117, 200
PER MAN PER DAY.					
Food purchased: Animal Vegetable	. 03	8 50	110 8	390	1, 055 1. 880
Total	.06	58	118	390	2, 935
PERCENTAGES OF TOTAL FOOD PURCHASED.					
Food purchased: Animal Vegetable	Per cent. 50.0 50.0	Per cent, 13, 5 86, 5	93. 3	Per cent.	Per cent. 36, 0 64, 0
Total	100.0	100.0	100.0	100.0	100.0

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 132).

The study began December 8, 1895, and continued twelve days.

The members of the family and number of meals taken were as follows:

	Meals.
Man about 40 years old	. 36
Woman about 47 years old (36 meals × 0.8 meal of man) equive	a-
lent to	. 29
Girl about 18 years old (36 meals × 0.8 meal of man) equivalent to.	. 29
Child about 11 years old (36 meals × 0.6 meal of man) equivalent to	. 22
Child about 8 years old (36 meals × 0.5 meal of man) equivalent to	. 18
Infant (36 meals × 0.3 meal of man) equivalent to	. 11
Total number of meals	. 145

Equivalent to one man for forty-eight days.

Remarks.—This family lived in a one-room log cabin on a plantation of 1,800 acres about 5½ miles from Tuskegee. They had a small barn rudely constructed of pine logs. The live stock consisted of two hogs, three hens, and a turkey. They cultivated a "one mule farm" of 30 acres raising cotton almost entirely and that under mortgage. The winter was spent in almost to al idleness. The house furniture consisted of two beds, a rude pine table, four homemade chairs, a chest, and a clock worth about \$10.

Table 34. - Food materials in dietary No. 132.

Composition.					Weight used.			
Kind of food material. Protein.				Total cost.	Total	Nutrients.		
	Fat. h	Carbo- hydrates.	food mate- rial.		Pro- tein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD. Pork: Fresh pork 1 Bacon 1 Lard.	10.6 7.5	66. 1		\$0.32 .52 .23	Grams. 2, 355 1, 815 1, 360	Grams. 250 136	971 1, 200	Grams.
Total animal food				1.07	5, 530	386	3, 531	

¹ Average of analyses of similar Alabama foods.

Table 34.—Food materials in dietary No. 132-Continued.

	C	composit	ion.		Weights used.				
Kind of food material.	7		Carbo- hydrates.	Total cost.	Total	Nutrients.			
	Pro- tein. Fat.	mate-			Pro- tein.	Fat.	Carbo- hydrates.		
VEGETABLE FOOD. Corn meal¹ Molasses¹ Greens¹ Sweet potatoes. Total vegetable food.	7.5 1.0 3.8 1.5	Per ct. 4.2 .1 .9 .6	Per ct. 65. 9 71. 8 8. 9 23. 1	\$0. 25 . 41 . 05 . 13	Grams. 9,070 4,140 905 7,710 21,825	Grams. 680 41 34 116	Grams. 381 4 8 46	Grams. 5, 977 2, 973 81 1, 781	
Total food	AL DESCRIPTION OF			1.91	27, 355	1, 257	3, 970	10, 812	

¹ Average of analyses of similar Alabama foods.

Table 35.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 132.

	Food]	Nutrient	s.	Food	2	utrient	s.	Cost.
Kind of food material.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	
FOR FAMILY, 12 DAYS. Pork, lard, etc	Grams. 5, 530	Grams. 386	Grams. 3, 531	Grams.	Lbs. 12.20	Lbs. 0, 90	I.bs. 7.80	Lhs.	\$1.07
Total animal food	5, 530	386	3, 531		12. 20	.50	7.80		1.07
Cereals, sugars, starches Vegetables	13, 210 8, 615	721 150	385 54	8, 950 1, 862	29. 10 19. 00	1.60 .30	.90	19. 70 4. 10	.66
Total vegetable food.	21, 825	871	439	10,812	48.10	1.00	1.00	23. 80	.84
Total food	27, 355	1, 257	3, 970	10.812	60.30	2. 80	8.80	23.80	1.91
PER MAN PER DAY. Pork, lard, etc	115	8	74		. 25	. 02	. 16		
Total animal food	115	8	74		.15	. 02	.16		.02
Cereals, sugars, starches Vegetables	275 180	15 3	8 1	186 39	. 61	. 03	. 02	.41	
Total vegetable food.	455	18	9	225	1.01	.04	. 02	. 50	. 013
Total food	570	26	83	225	1. 26	. 06	. 18	. 50	. 04
PERCENTAGES OF TOTAL FOOD.									
Pork, lard, etc	20. 2	30.7	88.9			•••••			56.0
Total animal food	20. 2	30.7	88. 9						56.0
Cereals, sugars, starches Vegetables	48. 3 31. 5	57. 4 11. 9	9. 7 1. 4	82. 8 17. 2					34. 6 9. 4
Total vegetable food.	79.8	69.3	11.1	100.0					44.0
Total food	100.0	100.0	100.0	100.0					100.0

Table 36.-Nutrients and potential energy in food purchased in dietary No. 132.

Kind of food material.		2	Fuel		
	Cost.	Protein.	Fat.	Carbo- hydrates.	value.
FOR FAMILY, 12 DAYS. Food purchased: Animal Vegetable Total	\$1.07 .84	Grams. 386 871 1, 257	Grams. 3,531 439 3,970	Grams. 10, 812 10, 812	Calories. 34, 420 51, 980 86, 400

Table 36.—Nutrients and potential energy in food purchased in dietary No. 132—Cont'd,

			Nutrients		Fuel value.	
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.		
PER MAN PER DAY.						
Food purchased: Animal Vegetable.	\$0.021 .013	Grams. 8 18		Grams.	Calories. 720 1,080	
Total	. 04	26	83	225	1,800	
PERCENTAGES OF TOTAL FOOD PURCHASED.						
Food purchased: Animal Vegetable.		30. 7	88. 9	Per cent. 100.0	Per cent. 39.8 60.2	
Total	100.0	100.0	100.0	100.0	10,00	

DIETARY OF A NEGRO (WOMAN) FARMER'S FAMILY IN ALABAMA (No. 133).

The study began December 8, 1895, and continued twelve days (2 meals per day). The members of the family and number of meals taken were as follows:

	Meals.
Woman 60 years old (24 meals × 0.8 meal of man) equivalent to	. 19
Woman 32 years old (24 meals × 0.8 meal of man) equivalent to	. 19
Girl 12 years old (24 meals × 0.6 meal of man) equivalent to	. 14
Boy 11 years old (24 meals × 0.6 meal of man) equivalent to	. 14
Boy 7 years old (24 meals \times 0.5 meal of man) equivalent to	. 12

Remarks.—This, family lives on a plantation about 7 miles from Tuskegee. The home life and conditions were probably the same as thirty years ago. The house was a one-room frame structure, roughly finished and very simply furnished. The live stock, kept in a barn, consisted of a cow, an ox, and six chickens. The rent of their farm was one and one-half bales of cotton. The family spent most of the winter in splitting pine rails and fishing.

Table 37.—Food materials in dietary No. 133,

	C	omposit	ion.		Weight used.					
Kind of food material.	Pro-		Carbo-	Total	Total		Nutrients.			
	tein.	Fat.	hydrates.	2000	food mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.		
Beef ¹ Bacon ¹	7.5	Per ct. 5. 2 66. 1 100. 0	Per cent.	\$0.10 .72 .23	Grams. 455 4,080 1,360	Grams. 88 306		Grams.		
Total animal food VEGETABLE FOOD.				1.05	5, 895	394	4, 081			
Corn meal ¹ Flour ¹ Molasses ¹ Greens ¹	7. 5 9. 6 1. 0 3. 8	4. 2 . 9 . 1 . 9	65. 9 78. 3 71. 8 8. 9	. 57 . 63 . 50 . 03	22, 680 8, 620 4, 990 510	1, 701 828 50 19	953 78 5 5	14, 946 6, 749 3, 583 45		
Total vegetable food				1.73	36, 800	2, 598	1,041	25, 323		
Total food				2.78	42, 695	2, 992	5, 122	25, 323		

¹ Average of analyses of similar Alabama foods.

Table 38.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 133.

	. 77. 1	2	Tutrient	s.	Food	N	utrient	š.	
Kind of food material.	* Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	mate- rial.	Pro- tein.	Fat.	Carbo- hy drates.	Cost.
FOR FAMILY, 12 DAYS. Beef, veal. and mutton Pork, lard, etc	Grams. 455 5, 440	Grams. 88 306	Grams. 21 4,057	Grams.	Lbs. 1.00 12.00	Lbs. 0.20 .70	Lbs. 0.10 8.90	Lbs.	\$0.10 .95
Total animal food	5, 895	394	4,081		13.00	. 90	9.00		1.05
Cereals, sugars, starches Vegetables	36, 290 510	2, 579 10	1.036	25. 278 45	80.00 1.10	5. 70	2.30	55.70 .10	1. 70 . 03
Total vegetable food.	36, 800	2. 598	1,041	25, 323	81.10	5. 70	2.30	. 55, 80	1. 73
Total food	42, 695	2, 992	5, 122	25, 323	94. 10	6. 60	11.30	55.80	2.78
PER MAN PER DAY.									
Beef, veal. and mutton Pork, lard, etc	12 139	2 8	1 104		.03	. 02	. 23		· · · · · · · · · · · · · · · · · · ·
Total animal food	151	10	105		. 33	.02	. 23		. 623
Cereals, sugars, starches Vegetables	931 13	66	26	648	2.05 .03	. 15	. , 06	1.43	
Total vegetable food.	944	67	26	649	2,08	.15	.06	1.43	. 041
Total food	1, 095	77	131	649	2.41	. 17	. 29	1.43	. 07
PERCENTAGES OF TOTAL FOOD.	December	D 4	Per ct.	D (Per ct.
Beef, veal, and mutton Pork, lard, etc	Per ct. 1.1 12.7	Per ct. 3. 0 10. 2	79. 2	Per ct.					3. 6 34. 2
Total animal food	13.8	13. 2	79. 7						57.8
Cereals. sugars, starches Vegetables	85. 0 1. 2	86. 2	20. 2	99.8					61. 1
Total vegetable food.	86. 2	86.8	20.3	100.0					62. 2
Total food	100.0	100.0	100.0	100.0					100.0

Table 39.—Nutrients and potential energy in food purchased in dietary No. 133.

			Nutrients		Fuel	
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	value.	
FOR FAMILY, 12 DAYS.						
Food purchased: Animal Vegetable	\$1.05 1.73	Grams. 394 2,598	Grams. 4, 081 1, 041	Grams.	39, 570	
Total	2.78	2, 992	5, 122	25, 323	163, 730	
Food purchased: Animal Végetable.	. 02 ³ / ₄		105 26	649	1, 020 3, 175	
Total	.07	77	131	649	4. 195	
PERCENTAGES OF TOTAL FOOD PURCHASED.						
Food purchased: Animal Vegetable	Per cent. 37. 8 62. 2	13. 2	79.7	Per cent.	24.2	
Total	100.0	100.0	100.0	100.0	100.0	

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 134).

The study began January 6, 1896, and continued eleven days (2 meals per day). The members of the family and number of meals taken were as follows:

M	eals.
Man 46 years old	22
Woman 40 years old (22 meals × 0.8 meal of man) equivalent to	18
Girl 20 years old (22 meals × 0.8 meal of man) equivalent to	18
Total number of meals	58

Equivalent to one man for twenty-nine days.

Remarks.—This family was located on a large plantation, $\$_2$ miles from Tuskegee, and occupied one room of a two-room frame cabin, the other half being occupied by another family. They managed a one-mule farm of 30 acres, which was free from mortgage. The husband worked in the swamp during the winter cutting fence rails. In the summer the family had a small garden with a general assortment of vegetables. The live stock consisted of a mule and a hog.

Table 40.—Food materials in dietary No. 134.

	C	omposit	ion.		Weight used.					
Kind of food material.	Pro-		Carbo-	Total cost.	Total		Nutrients.			
	tein. Fat.		hydrates.		mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.		
ANIMAL FOOD. Pork: Fresh pork! Bacon! Lard.	10.6 7.5	Per ct. 41. 9 66. 1 100. 0	Per cent.	\$1.00 .16 .14	Grams. 4, 535 905 820	Grams. 481 68	Grams. 1,900 598 820	Grams.		
Total animal food VEGETABLE FOOD.				1,30	6, 260	549	3, 318			
Corn meal ¹ Flour ¹ Molasses ¹ Sweet potatoes	7.5 9.6 1.0 1.5	4. 2 . 9 . 1 . 6	65. 9 78. 3 71. 8 23. 1	. 45 . 45 . 16 . 07	16, 330 6, 805 1, 560 4, 160	1, 225 653 16 62	686 61 1 25	10, 761 5, 329 1, 120 961		
Total vegetable food				1.13	28, 855	1, 956	773	18, 171		
Total food				2.43	35, 115	2, 505	4, 091	18, 171		

¹ Average of analyses of similar Alabama foods.

Table 41.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 134.

	Food	1	Nutrient	s.	Food	2			
Kind of food material.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	mate-	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 11 DAYS.	Grams.	Grams.	Grams.	Grams.	Lbs.	Lbs.	Lbs.	Lbs.	
Pork, lard, etc	6, 260	549	3, 318		13. 80	1. 20	7. 30		\$1.30
Total animal food	6, 260	549	3, 318		13. 80	1. 20	7.30		1.30
Cereals, sugars, starches Vegetables	24, 695 4, 160	1, 894 62	748 25	17, 210 961	54. 40 9. 20	4. 20	1.60	38. 00 2. 10	1.06
Total vegetable food.	28, 855	1, 956	773	18, 171	63.60	4.30	1.70	40.10	1. 13
Total food	35, 115	2, 505	4, 091	18, 171	77. 40	5. 50	9. 00	40 10	2. 43

Table 41.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 134—Continued.

	Food	2	utrient	3.	Food	2	Tutrient	s.	
Kind of food material.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
PER MAN PER DAY. Pork, lard, etc	Grams. 216	Grams.	Grams. 114	Grams.	Lbs. 0.48	Lbs. 0 04	Lbs. 0.25	Lbs.	
Total animal food	216	19	114		.48	. 04	. 25		\$0.04½
Cereals, sugars, starches	852 143	65	26 1	594 33	1.88	.14	. 06	1.31	
Total vegetable food.	995	67	27	627	2. 19	. 15	. 06	1. : 8	. 04
Total food	1, 211	86	141	627	- 2.67	. 19	. 31	1.38	. 081
PERCENTAGES OF TOTAL FOOD.	Per ct.	Per ct.	Per ct.	Per ct.					Per ct.
Pork, lard, etc	17. 8	21. 9	81.1						53, 5
Total animal food	17.8	21. 9	81.1						53. 5
Cereals, sugars, starches Vegetables	70.3 11.9	75. 6 2. 5	18.3	94. 7 5. 3					43. 6 2. 9
Total vegetable food.	82. 2	78. 1	18.9	100.0					46.5
Total food	100.0	100.0	100.0	100.0					100.0

Table 42.—Nutrients and potential energy in food purchased in dietary No. 134.

			Nutrients		
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	Fuel value.
FOR FAMILY, 11 DAYS.					
Food purchased: Animal. Vegetable	\$1.30 1.13	Grams. 549 1,956	Grams. 3,318 773	Grams. 18, 171	Calories. 33, 110 89, 710
Total	2.43	2, 505	4, 091	18, 171	122, 820
PER MAN PER DAY.					
Food purchased: Animal. Vegetable.	. 04½ . 04	19 67	114 27	627	1, 140 3, 095
Total	. 08½	86	141	627	4, 235
PERCENTAGES OF TOTAL FOOD PURCHASED.					
Food purchased: Animal Vegetable	Per cent. 53. 5 46. 5	Per cent. 17. 8 82. 2	Per cent. 21.9 78.1	Per cent. 81.1 18.9	Per cent. 27.0 , 73.0
Total	100.0	100.0	100.0	100.0	100.0

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 135).

The study began December 12, 1895, and continued fifteen days (2 meals per day). The members of the family and number of meals taken were as follows:

	Mea	ls.
Woman 60 years old (30 meals × 0.8 meal of man) equivalent to.		24
Man 25 years old		30
Total number of meals		54
quivalent to one man for twenty govern days		

quivalent to one man for twenty-seven days. 12246—No. 38——4

Remarks.—This family lived on a plantation of some 1,400 acres. The mother hired about 30 acres, paying a bale and a half of cotton, and actively assisted her son in plowing and caring for the farm during the working season. The son occasionally hauled a small load of pine wood to the village in the winter and the mother passed the time as best she could in one of the two rooms in their cabin. The live stock consisted of two oxen, three hogs, and a few chickens.

Table 43.—Food materials in dietary No. 135.

	C	Composit	ion.	Total	Weight used.				
Kind of food material.	D		Caralia		Total food		Nutrients.		
	Pro- tein.	Fat.	Carbo- hydrates.		mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD. Pork, bacon 1	Per ct. 7.5		Per cent.				Grams. 1, 686	Grams.	
VEGETABLE FOOD. Corn meal ¹ Flour ¹ Molasses ¹ Sugar	7. 5 9. 6 1. 0	4. 2 . 9 . 1	65, 9 78, 3 71, 8 100, 0	. 15 . 38 . 17 . 06	13, 635 2, 270 1, 700 395	1, 023 218 17	573 21 2	8, 985 1, 777 1, 220 395	
Total vegetable food				.76	18,000	1, 258	596	12, 377	
Total food				1.21	20, 550	1, 449	2, 282	12, 377	

Average of analyses of similar Alabama foods.

Table 44.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 135.

	77	1	Nutrient	s.	Food Nutrients.			3.	
Kind of food material.	Food ma- terial.	Pro- tein.	Fat.	Carbo- hy- drates.	ma- terial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 15 DAYS. Pork, lard, etc	Grams. 2, 550 18, 000	Grams. 191 1, 258	Grams. 1, 686 596 2, 282	Grams. 12, 377 12, 377	Lbs. 5. 60 39. 70 45. 30	Lbs. 0.40 2.80	Lbs. 3.70 1.30	27. 30 27. 30	\$0.45 .76 1.21
PER MAN PER DAY.									
Pork, lard, etc	94 667	7 47	63 22	458	. 21 1. 47	.02	. 14	1.01	. 013 . 023
Total food	761	54	85	458	1.68	. 12	. 33	1.01	. 04½
PERCENTAGES OF TOTAL FOOD.	Per ct.	Per ct.	Per ct.	Per ct.					Per ct.
Pork, lard, etc	12. 4 87. 6	13. 2 86. 8	73. 9 26. 1	100.0					37. 2 62. 8
Total food	100.0	100.0	100.0	100.0					100.0

Table 45.—Nutrients and potential energy in food purchased in dietary No. 135.

			Nutrients.		T31
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	Fuel value.
FOR FAMILY, 15 DAYS.		0	<i>C</i>		C-7- 1
Food purchased: Animal. Vegetable.	\$0.45 .76	Grams. 191 1, 258	Grams. 1,686 596	Grams. 12, 377	Calories. 16, 465 61, 445
Total	1.21	1,449	2, 282	12, 377	77, 910
Food purchased: Animal. Vegetable	. 013 . 023		63 22	458	615 2, 275
Total	. 04½	54	85	458	2, 890
Food purchased: Animal. Vegetable	Per cent. 37. 2 62. 8	Per cent. 13. 2 86. 8	Per cent. 73, 9 26, 1	Per cent.	Per cent. 21.1 78.9
Total	100.0	100.0	100.0	100.0	100.0

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 136).

The study began January 6, 1896, and continued eighteen days (2 meals per day). The members of the family and number of meals taken were as follows:

	Meals.
Man 48 years old.	. 36
Man 50 years old	. 36
Woman 32 years old (36 meals × 0.8 meal of man) equivalent to	. 29
Girl 13 years old (36 meals × 0.6 meal of man) equivalent to	. 21
Total number of meals.	. 122

Equivalent to one man for sixty-one days.

Remarks.—The family carried on a 40-acre farm on one of the oldest plantations in the Tuskegee section, some sixteen negro families living on the same place. The crop of 1896, entirely of cotton, was mortgaged in advance to secure winter provisions and farm implements. A small corncrib of logs and a barn similarly constructed constituted the outbuildings. The husband and wife spent a part of the winter days in cutting shingles in a neighboring swamp. The live stock consisted of a mule, three pigs, and a half dozen chickens. They occupied one room of a two-room cottage and rented the other.

Table 46.—Food materials in dietary No. 136.

	C	omposit	ion.		Weight used.				
Kind of food material.	Pro-	Duo	Carbo-	Total	Total	Nutrients.			
	tein.	Fat.	hydrates.		food mate- 1ial.	Pro- tein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD. Pork, bacon ¹	Per ct. 7.5		Per cent.	\$1.70	Grams. 9, 610	Grams. 721	Grams. 6, 352	Grams.	
VEGETABLE FOOD. Corn meal 1 Flour 1 Molasses 1 Sugar Greens 1	9. 6 1. 0	4.2	65. 9 78. 3 71. 8 100. 0 8. 9	45 .57 .42 .02	20, 640 6, 745 4, 215 115 735	1, 548 648 42	867 61 4	13, 602 5, 281 3, 027 115 65	
m			0.8	1.50		2, 266	939	22, 090	
Total food				3. 20	42, 060	2, 987	7, 291	22, 090	

Table 47.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 136.

		1	Nutrient	s.		1	Nutrient	3.	
Kind of food material.	Food mate- rial.	l'ro- tein.	Fat.	Carbo- lıy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 18 DAYS.	~	~	~	~					
Pork, lard, etc	Grams. 9, 610	Grams. 721	Grams. 6, 352	Grams.	Lbs. 21.20	Lbs. 1.60	Lbs. 14.00	Lbs.	\$1.70
Total animal food	9, 610	721	6, 352		21. 20	1.60	14.00		1.70
Cereals, sugars, starches Vegetables	31, 715 735	2, 238 28	932	22, 025 65	69. 90 1. 60	4.90	2.10	48.60	1.46 .04
Total vegetable food.	32, 450	2, 266	939	22, 090	71.50	5.00	2.10	48. 70	1.50
Total food	42,060	2, 987	7, 291	22, 090	92.70	6, 60	16. 10	48.70	3.20
PER MAN PER DAY.									
Pork, lard, etc	158	12	104		. 35	. 03	. 23		
Total animal food	158	12	104		. 35	. 03	. 23		. 023
Cereals, sugars, starches Vegetables	520 12	37	15	361 1	1.14	. 08	. 03	. 80	
Total vegetable food.	532	37	15	362	1.17	.08	. 03	. 80	. 021
Total food	690	49	119	362	1.52	. 11	. 26	. 80	. 051
PERCENTAGES OF TOTAL FOOD.									
Pork, lard, etc	Per ct. 22.8	Per ct. 24. 1	Per ct. 87. 1	Per ct.					Per ct. 53. 1
Total animal food	22.8	24.1	87.1						53. 1
Cereals, sugars, starches Vegetables	75. 4 1. 8	74. 9 1. 0	12.8	99.7					45, 6 1, 3
Total vegetable food.	77. 2	75. 9	12.9	100.0					46.9
Total food	100.0	100.0	100.0	100.0					100.0

Table 48.—Nutrients and potential energy in food purchased in dietary No. 136.

			Nutrients		Fuel	
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	value.	
FOR FAMILY, 18 DAYS.						
Food purchased: Animal Vegetable	\$1.70 1.50	Grams. 721 2, 266	Grams. 6,352 939	Grams. 22, 090	Calories. 62, 030 108, 590	
- Total	3. 20	2. 987	7, 291	22,090	170, 620	
PER MAN PER DAY.						
Food purchased: Animal Vegetable.	. 02\frac{3}{4} . 02\frac{1}{2}	12 37	104 15	362	1, 015 1, 775	
Total	. 051	49	119	362	2, 790	
PERCENTAGES OF TOTAL FOOD PURCHASED.	-					
Food purchased: Animal Vegetable.	53. 1	Per cent. 24. 1 75. 9	87. 1	Per cent.	Per cent. 36. 4 63. 6	
Total	100.0	100. 0	100. υ	100.0	100.0	

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 137).

The study began January 28, 1896, and continued eighteen days.

The members of the family and number of meals taken were as follows:

	Meals.
Man 57 years old	. 54
Girl 9 years old (54 meals × 0.5 meal of man) equivalent to	27
Girl 7 years old (54 meals × 0.5 meal of man) equivalent to	. 27
Girl 5 years old (54 meals × 0.4 meal of man) equivalent to	. 22
Boy 3 years old (54 meals × 0.4 meal of man) equivalent to	. 21
Infant 1 year old (54 meals × 0.3 meal of man) equivalent to	
	-
m + 1	107

Equivalent to one man for fifty-six days.

Remarks.—This family lived in one room of a two-room log cabin on a plantation 7 miles from Tuskegee. They were miserably poor, subsisting for days at a time on nothing but corn pone. The man managed a one-mule farm, raised only cotton, and paid a bale and a half of the same for rent. The live stock consisted of two chickens, a mule being hired during the cotton season. During the winter they made chairs for sale among the neighbors.

Table 49.—Food materials in dietary No. 137.

	C	omposit	ion.		Weight used.				
Kind of food material.	70		Gb-	Total cost.	Total	Nutrients.			
	Pro- tein.	Fat.	Carbo- hydrates.	costi	mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD.	D	704	D		G	~	a		
Pork, bacon 1	Per ct. 7.5		Per cent.	\$0.18	1,040	Grams. 78	687	Grams.	
Total animal food				.18	1,040	78	687		
VEGETABLE FOOD.									
Corn meal ¹ . Flour ¹ . Molasses ¹ .		4.2 .9 .1	65. 9 78. 3 71. 8	.11 .54 .40	19, 405 1, 730 3, 995	1, 455 166 40	815 16 4	12. 788 1, 354 2, 868	
Total vegetable food				1.05	25, 130	1,661	835	17,010	
Total food				1.23	26, 170	1,739	1,522	17, 010	

Average of analyses of similar Alabama foods.

Table 50.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 137.

	Food Nutrients.			Food Nutrients.					
	mate-	Pro- tein.	Fat.	Carbo- hy- drates.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 18 DAYS. Pork, lard, etc Cereals, sugars, starches Total food	1,040	78		Grams. 17, 010 17, 010	Lbs. 2, 30 55, 40	Lbs. 0.20 3.60	Lbs. 1.50 1.80	1.08. 37.50	\$0. 18 1. 05

Table 50.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 137—Continued.

	Tood	N	Tutrients	3.	Nutrients.					
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.	
PER MAN PER DAY. Pork, lard, etc Cereals, sugars, starches	Grams. 18 449	Grams.	Grams. 12 15	Grams.	Lbs. 0.04 .99	Lbs.	Lbs. 0.03 .03	Lbs. 0.67	\$0. 0 0 1	
Total food	467	31	27	304	1.03	. 07	. 06	. 67	. 021/4	
PERCENTAGES OF TOTAL FOOD.	_	_								
Pork, lard, etc	Per ct. 4. 0 96. 0	Per ct. 4. 5 95. 5	Per ct. 45. 1 54. 9	Per ct.					Per ct. 14. 6 85. 4	
Total food	100.0	100.0	100.0	100.0					100.0	

Table 51.—Nutrients and potential energy in food purchased in dietary No. 137.

			Nutrients		Fuel
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	value.
FOR FAMILY, 18 DAYS.					
Food purchased: Animal. Vegetable	\$0.18 1.05	Grams. 78 1,661	Grams. 687 835	Grams.	Calories. 6,710 84,320
Total	1. 23	1, 739	1,522	17, 010	91, 030
PER MAN PER DAY.			-		
Food purchased: Animal Vegetable		1 30	12 15	304	115 1, 510
Total	. 021	31	27	304	1, 625
PERCENTAGES OF TOTAL FOOD PURCHASED.					
Food purchased: Animal Vegetable	Per cent. 14. 6 85. 4	Per cent. 4. 5 95. 5	Per cent. 45, 1 54, 9	Per cent.	Per cent. 7. 4 92. 6
Total	100.0	100.0	100.0	100.0	100, 0

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 138).

The study began January 28, 1896, and continued sixteen days (2 meals per day). The members of the family and number of meals taken were as follows:

	Meals.
Woman 28 years old (32 meals × 0.8 meal of man) equivalent to	26
Boy 12 years old (32 meals \times 0.6 meal of man) equivalent to	19
Total number of meals	45

Equivalent to one man for twenty-two days.

Remarks.—This family managed a two-mule farm on a large plantation 8 miles from Tuskegee, paying $2\frac{1}{2}$ bales of cotton as rent. The one-room cabin was neatly furnished, and the woman in spare moments made dresses and bonnets for her neighbors. She was the owner of a sewing machine. The property of the family was this year free from mortgage. The live stock consisted of two mules, one cow, and a few hens. They had a corn crib and small barn made of logs.

Table 52.—Food materials in dietary No. 138.

	C	omposit	ion.		Weight used.				
Kind of food material.	Pro-		Carbo-	Total cost.	Total food	Nutrients.			
	tein.	Fat.	hydrates.		mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD.									
	Per ct.	Per ct.	Per cent.			Grams.		Grams.	
Pork, bacon 1	7.5	66. 1		\$0.55	3,095	232	2,046		
Butter ¹	1. 2	82.4		. 13	285	3	235		
Milk	3. 3	4.0	5. 0	. 12	1,360	45	54	68	
Buttermilk	3.0	.5	4.8	. 07	2, 720	81	14	131	
Total animal food				. 87	7,460	361	2, 349	199	
VEGETABLE FOOD.									
Corn meal 1	7.5	4.2	65. 9	. 22	5, 725	429	240	3, 773	
Flour 1		.9	78. 3	.16	3, 290	316	30	2, 576	
Molasses ¹		.1	71. 8	.40	4, 080	41	4	2, 929	
		• 1	95. 0	. 09	850	41	*	808	
Sugar (C)			95.0	.05	690			000	
Total vegetable food				. 87	13, 945	786	274	10,086	
Total food				1.74	21, 405	1, 147	2, 623	10, 285	

¹Average of analyses of similar Alabama foods.

Table 53.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 138.

		2	Nutrient	8.		_ N	Nutrient	3.	
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 16 DAYS. Pork, lard, etc	Grams. 3, 095 285 1, 360 2, 720	Grams. 232 3 45 81	Grams. 2,046 235 54 14	Grams. 68 131	Lbs. 6.80 .60 3.00 6.00	Lbs. 0.50	Lbs. 4.50 .50 .10 .10	Lbs.	\$0.55 .13 .12 .07
Total animal food	7, 460	361	2, 349	199	16.40	. 80	5.20	.50	. 87
Cereals, surgars, starches.	13, 945	786	274	10, 086	30.80	1.70	. 60	22. 20	. 87
Total vegetable food.	13, 945	786	274	10, 086	30. 80	1.70	. 60	22. 20	. 87
Total food	21, 405	1, 147	2, 623	10, 285	47. 20	2.50	5.80	22.70	1.74
PER MAN PER DAY. Pork, lard, etc Butter Milk Buttermilk	141 13 62 123	10 2 4	93 11 2 1	3 6	.31 .03 .14 .27	.02	.21	.01	
Total animal food	339	16	107	9	.75	. 03	. 24	.02	. 04
Cereals, sugars, starches	634	36	13	458	1.40	. 08	. 03	1.01	
Total vegetable food.	634	36	13	458	1.40	. 08	. 03	1.01	. 04
Total food	973	· 52	120	467	2.15	.11	. 27	1.03	.08
PERCENTAGES OF TOTAL FOOD. Pork, lard, etc. Butter Milk Buttermilk	Per ct. 14.5 1.3 6.4 12.7	Per ct. 20. 2 . 3 3. 9 7. 1	Per ct. 78.0 9.0 2.1 .5	Per ct.					Per ct. 31. 6 7. 5 6. 9 4. 0
Total animal food	34.9	31.5	89. 6	1.9					50. 0
Cereals, sugars, starches	65. 1	68. 5	10. 4	98. 1					50.0
Total vegetable food.	65. 1	68.5	10.4	98. 1					59.0
Total food	100.0	100.0	100.0	100, 0					100.0

Table 54.—Nutrients and potential energy in food purchased in dietary No. 138.

			Nutrients.		Fuel value.	
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.		
FOR FAMILY, 16 DAYS.						
Food purchased: Animal. Vegetable	\$0.87 .87	Grams. 361 786	Grams. 2, 349 274	Grams. 199 10, 086	Calories. 24, 140 47, 125	
Total	1.74	1, 147	2, 623	10, 285	71, 265	
PER MAN PER DAY.			-			
Food purchased: Animal. Vegetable	.04	16 36	107 13	9 458	1, 100 2, 145	
Total	.08	52	120	467	3, 245	
PERCENTAGES OF TOTAL FOOD PURCHASED.						
Food purchased: Animal Vegetable	Per cent. 50. 0 50. 0	Per cent. 31, 5 68. 5	Per cent. 89. 6 10. 4	Per cent. 1. 9 98. 1	Per cent. 33. 9 66. 1	
Total	100.0	100.0	100, 0	100.0	100.0	

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 139).

The study began January 28, 1896, and continued sixteen days. The members of the family and number of meals taken were as follows:

	Meal.
Man about 33 years old	48
Woman about 30 years old (48 meals × 0.8 meal of man) equivaler	nt
to	. 38
Total number of meals	86

Equivalent to one man for twenty-nine days.

Remarks.—This family lived on a 25-acre farm on a plantation of 1,500 acres, some $7\frac{1}{2}$ miles from Tuskegee. The one-room log cabin was attractively surrounded by flowers and a vegetable garden, and the interior showed some attempts at adornment. They raised cotton, corn, and potatoes; cured their own bacon this year, and made some 15 pounds of lard. The live stock consisted of a mule, four small pigs, and six hens, which were kept in a log barn.

Table 55.—Food materials in dietary No. 139.

	C	Composit	ion.		Weight used.			
Kind of food material.	70			Total	Nutrients.			
	Pro- tein.	Fat.	Carbo- hydrates.		mate-	Pro- tein.	Fat.	Carbo- hydrates.
ANIMAL FOOD.								
Pork:	Per ct.	Per ct.	Per cent.		Grams.			Grams.
Fresh pork 1	10.6	41.9		\$1.04	2, 270	241	951	
Bacon 1		66. 1		. 50	5, 895	442	3, 897	
LardMilk	3.3	100. 0 4. 0	5. 0	.38	2, 270 1, 020	33	2, 270 41	51
Total animal food				2.01	11, 455	716	7, 159	5
VEGETABLE FOOD.								
Corn meal 1	7.5	4.2	65. 9	. 35	13, 610	1,021	572	8,968
Flour ¹	9.6	.9	78. 3	.38	5, 245	504	47	4, 107
Rice		.4	79.0	. 07	595	46	2	471
Sugar (C)			95. 0	. 11	1,030		10	979
Sweet potatoes	1.5	. 6	23.1	. 03	1, 985	30	12	458
Total vegetable food				. 94	22, 465	1,601	633	14, 983
Total food				2. 95	33, 920	2, 317	7, 792	15, 034

Table 56.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 139.

	77. 1	N	utrient	8.	71 1	N	Tutrients	8.	
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 16 DAYS. Pork, lard, etc	Grams. 10, 435 1, 020	Grams. 683 33	Grams. 7, 118 41	Grams.	Lbs. 23.00 2.30	Lbs. 1.50 .10	Lbs. 15.70 .10	Lbs.	\$1.92 .09
Total animal food	11, 455	716	7, 159	51	25.30	1.60	15.80	.10	2.01
Cereals, sugars starches Vegetables	20, 480 1, 985	1, 571	621 12	14, 525 458	45. 10 4. 40	3.40 .10	1.40	32.00 1.00	. 91
Total vegetable food.	22, 465	1,601	633	14, 983	49. 50	3.50	1.40	33.00	. 94
Total food	33, 20	2, 317	7, 792	15,034	74.80	5.10	17. 20	33. 10	2.95
PER MAN PER DAY.									
Pork, lard, etc	360 35	24 1	246 1	1	.79 .08	. 06	. 54		· · · · · · · · · · · · · · · · · · ·
Total animal food	395	25	247	1	. 87	.06	. 54		. 07
Cereals, sugars, starches Vegetables	706 69	54 1	22	501 16	1. 56 . 15	.12	. 05	1.10	
Total vegetable food.	775	55	22	517	1.71	. 12	. 05	1.14	. 031
Total food	1, 170	80	269	518	2. 58	.18	. 59	1.14	. 101
PERCENTAGES OF TOTAL FOOD.	Per ct.	Per ct.	Per ct.	Per ct.					Per•ct.
Pork, lard, etc	30. 8	29. 5 1. 4	91.4	.3					65. 1 3. 0
Total animal food	33.8	30.9	91. 9	. 3					68.1
Cereals, sugars, starches Vegetables	60. 4 5. 8	67. 8 1. 3	8. 0 :1	96. 6 3. 1					30. 9 1. 0
Total vegetable food.	66. 2	69.1	8.1	90.7					31.9
Total food	100.0	100.0	100.0	100.0					100.0

Table 57.—Nutrients and potential energy in food purchased in dietary No. 139.

			Nutrients		773 - 1
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	Fuel value.
FOR FAMILY, 16 DAYS.					
Food purchased: Animal Vegetable.	\$2.01 .94	Grams. 716 1,601	Grams. 7, 159 633	Grams. 51 14, 983	Calories. 69, 720 73, 880
Total	2.95	2, 317	7,792	15, 034	143, 600
PER MAN PER DAY.					
Food purchased: Animal. Vegetable.	. 07 . 034	25 55	247 22	1 517	2, 405 2, 550
Total	. 101	80	269	518	4, 955
PERCENTAGES OF TOTAL FOOD PURCHASED.					
Food purchased: Animal. Vegetable	Per cent. 68. 1 31. 9	Per cent. 30, 9 60, 1	Per cent. 91. 9 8. 1	Per cent. 0. 3 99. 7	Per cent. 48. 6 51. 4
Total	100.0	100.0	100.0	100.0	100.0

DIETARY OF A PLANTATION HAND'S FAMILY IN ALABAMA (No. 140).

The study began January 29, 1896, and continued fifteen days (2 meals per day). The members of the family and number of meals taken were as follows:

	Meals.	
Woman 29 years old (30 meals × 0.8 meal of man) equivalent to	24	
Boy 10 years old (30 meals × 0.6 meal of man) equivalent to	18	
Boy 8 years old (30 meals \times 0.5 meal of man) equivalent to	15	
Boy 5 years old (30 meals \times 0.4 meal of man) equivalent to	12	
Child 2 years old (30 meals \times 0.4 meal of man) equivalent to	12	
Total number of meals	81	

Equivalent to one man for forty days.

Remarks.—This family lived in a one-room log cabin on a plantation about 7 miles from Tuskegee, and consisted of a mother and four children. The support of the entire family rested on the mother, who worked as a common plantation laborer—plowing and doing the same work as men. There is a barn and an old log shed. The live stock consisted of two hens.

Table 58.-Food materials in dietary No. 140.

	C	omposit	osition. Weight use					
Kind of food material.	D			Total	Nutrients.			
	Pro- tein.	Fat.	Carbo- hydrates.		mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.
ANIMAL FOOD. Pork: Fresh pork! Bacon! Buttermilk	10. 6 7. 5	Per ct. 41. 9 66. 1 . 5	Per ct4.8	\$1.66 .18 .01	Grams. 795 9, 440 480	Grams. 84 708 14	Grams. 333 6, 240 3	Grams.
Total animal food				1.85	10, 715	806	6, 576	25
VEGETABLE FOOD.	1							
Corn meal ¹		4. 2	65. 9 95. 0	. 46 . 22	16, 785 1, 955	1, 259	705	11, 061 1, 857
Total vegetable food				. 68	18,740	1, 259	705	12, 918
Total food				2.53	29, 455	2, 065	7, 281	12, 94

¹Average of analyses of similar Alabama foods.

Table 59.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 140.

	Food	2	Sutrient	3.	F 1	1	Nutrient	s.	
Kind of food material.	mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 15 DAYS. Pork, lard, etc Buttermilk.	Grams. 10, 235 480	Grams. 792 14	Grams. 6, 573	Grams.	Lbs. 22, 60 1, 00	Lbs. 1.80	Lbs. 14.50	Lbs.	\$1.84 .01
	10, 715	806	6, 576	23	23. 60	1.80	14. 50		1.85
Cereals, sugars, starches	18, 740	1, 259	705	12, 918	41.30	2.80	1.60	28. 50	. 68
Total vegetable food.	18, 740	1, 259	705	12, 918	41. 30	2.80	1.60	28 50	. 68
Total food	29, 455	2, 065	7, 281	12, 941	64. 90	4. 60	16. 10	28.50	2. 53

Table 59.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 140—Continued.

	77 1	1	Nutrient	s.	77. 7	2	s.		
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
PER MAN PER DAY. Pork, lard, etc Buttermilk	Grams. 256 12	Grams.	Grams. 164	Grams.	Lbs. 0.56 .03	Lbs. 0.04	Lbs. 0.36	Lbs.	
Total animal food	268	20	164	1	. 59	. 04	. 36		\$0.04
Cereals, sugars, starches	468	32	18	323	1.03	. 07	. 04	0.71	
Total vegetable food.	468	32	18	323	1. 63	. 07	. 04	. 71	. 013
Total food	736	52	182	324	1.62	.11	. 40	. 71	. 064
PERCENTAGES OF TOTAL FOOD. Pork, lard, etc	Per ct. 34.8 1.6	Per ct. 38.3	Per ct. 90.3	Per ct.					Per ct. 72.7
Total animal food	36.4	39.0	90. 3	. 2					73. 1
Cereals, sugars, starches	63. 6	61.0	9. 7	99.8					26. 9
Total vegetable food.	63, 6	61.0	9.7	99.8					26. 9
Total food	100. 0	100.0	100.0	100.0					100.0

Table 60 .- Nutrients and potential energy in food purchased in dietary No. 140.

	[37. 4. 1 4.			
			Nutrients	•	Fuel	
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	value.	
FOR FAMILY, 15 DAYS.						
Food purchased: Animal. Vegetable.	\$1.85 .68	Grams. 806 1,259	Grams. 6,576 705	Grams. 23 12, 918	Calories. 64, 560 64, 680	
Total	2.53	2,065	7, 281	12, 941	129, 240	
PER MAN PER DAY.						
Food purchased: Animal Vegetable	.041	20 32	164 18	1 323	1, 610 1, 625	
Total	.061	52	182	324	3, 235	
PERCENTAGES OF TOTAL FOOD PURCHASED.						
Food purchased: Animal. Vegetable.		Per cent. 39.0 61.0		Per cent. .2 99.8	Per cent. 50.0 50.0	
Total	100.0	100.0	100.0	100.0	100.0	

DIETARY OF A NEGRO FARMER'S FAMILY IN ALABAMA (No. 141).

The study began February 1, 1896, and continued fifteen days.

The members of the family and number of meals taken were as follows:

	Meals.
Man 40 years old	45
Woman 29 years old (45 meals × 0.8 meal of man) equivalent to	36
Boy 16 years old (45 meals × 0.8 meal of man) equivalent to	36
Boy 14 years old (45 meals × 0.8 meal of man) equivalent to	36
Boy 9 years old (45 meals \times 0.5 meal of man) equivalent to	23
Girl 7 years old (45 meals × 0.5 meal of man) equivalent to	22
Girl 7 years old (45 meals × 0.5 meal of man) equivalent to	22
Boy 4 years old (45 meals × 0.4 meal of man) equivalent to	18
Child 16 months old (45 meals × 0.3 meal of man) equivalent to	14
Total number of meals	252

Equivalent to one man for eighty-four days.

Remarks.—This family lived on a 40-acre cotton farm on a plantation some 7 miles from Tuskegee in the cotton valley district. Their one-room cabin was built entirely by themselves and was apparently warm and comfortable. This last year in addition to their cotton they raised a small patch of sugar cane and cowpeas. Though in the habit of mortgaging his crops in past years, the husband is now attempting to better his condition. The live stock consisted of an old mule, six pigs, and a hen.

Table 61.—Food materials in dietary No. 141.

	C	ompositi	ion.		Weight used.				
Kind of food material.	_		Carbo-	Total	Total	Nutrients.			
	tein.	Protein. Fat.		cost.	food mate- rial.	Pro- tein.	Fat.	Carbo- hydrates.	
ANIMAL FOOD.									
Pork:	Per ct.	Per ct.	Per cent.		Grams.	Grams.	Grams.	Grams.	
Fresh pork 1	10.6	41.9		\$1.08	2, 720	288	1, 140		
Bacon i		66.1		. 60	6, 095	457	4,029		
Lard		100.0		. 39	2, 345		2, 345		
Milk	3. 3	4.0	5. 0	. 10	1, 135	38	45	57	
Total animal food				2.17	12, 295	783	7,559	57	
VEGETABLE FOOD.									
Corn meal 1	7.5	4.2	65.9	.18	14,970	1, 123	629	9,864	
Flour 1	9.6	. 9	78.3	. 41	2,720	261	24	2, 130	
Rice	7.8	.4	79.0	. 15	1,360	106	6	1,074	
Molasses 1	1.0	. 1	71.8	. 29	2, 950	30	3	2, 118	
Sugar			100.0	.06	455			455	
Cowpeas	21.6	1.4	61. 3	. 05	1,985	429	28	1, 216	
Sweet potatoes		. 6	23.1	.08	4, 535	68	27	1.048	
Total vegetable food				1. 22	28. 975	2, 017	717	17, 905	
Total food				3.39	41 270	2,800	8, 276	17, 962	

Average of analyses of similar Alabama foods.

Table 62.—Weights and percentages of food materials and nutritive ingredients used in dietary No. 141.

	Tr. 1	2	Sutrient:	s.	D 1	N			
Kind of food material.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Food mate- rial.	Pro- tein.	Fat.	Carbo- hy- drates.	Cost.
FOR FAMILY, 15 DAYS. Pork, lard, etc	Grams. 11, 160 1, 135	Grams. 745 38	Grams. 7, 514 45	Grams.	Lbs. 24. 60 2. 50	Lbs. 1.60 .10	Lbs. 16. 60	Lbs.	\$2.07 .10
Total animal food	12, 295	783	7, 559	57	27.10	1.70	16.70	.10	2.17
Cereals, sugars, starches Vegetables	22, 455 6, 520	1,520 497	662 55	15, 641 2, 264	49. 50 14. 40	3. 40 1. 10	1.40	34 50 5.00	1.09 .13
Total vegetable food.	28, 975	2, 017	717	17, 905	63, 90	4. 50	1,50	39.50	1. 22
Total food	41, 270	2,800	8, 276	17, 962	91.00	6.20	18. 20	39.60	3.39
PER MAN PER DAY.									
Pork, lard, etc	133 13	9	89 1	1	. 29	. 02	. 20		
Total animal food	146	9	90	1	.32	. 02	. 20		· 02½
Cereals, sugars, starches. Vegetables	267 78	18 6	8 1	186 27	.59	.04	.02	. 41	
Total vegetable food.	345	24	9	213	.76	.05	. 02	. 47	. 01½
Total food	491	33	99	214	1.08	. 07	. 22	. 47	. 04
PERCENTAGES OF TOTAL FOOD,									
Pork, lard, etc	Per ct. 27. 0 2. 8	Per ct. 26. 6 1. 4	Per ct. 90. 8 . 5	Per ct.					Per ct. 61. 1 2. 9
Total animal food	29.8	28. 0	91.3	.3					64.0
Cereals, sugars, starches Vegetables	54. 4 15. 8	54. 3 17. 7	8.0	87. 1 12. 6					32. 2 3. 8
Total vegetable food.	70. 2	72.0	8. 7	99.7					36.0
Total food	100.0	100.0	100.0	100.0					100.0

Table 63.—Nutrients and potential energy in food purchased in dietary No. 141.

			77. 1			
Kind of food material.	Cost.	Protein.	Fat.	Carbo- hydrates.	Fuel value.	
FOR FAMILY, 15 DAYS.						
Food purchased : Animal Vegetable	\$2.17 1.22	Grams. 783 2, 017	Grams. 7,559 717	Grams. 57 17, 905	Calories. 73, 740 88, 350	
Total	3.39	2,800	8, 276	17,962	162, 090	
Food purchased: Animal. Vegetable	. 02½ . 01½	9 24	90 9	1 213	880 1, 055	
Total	. 04	33	99	214	1, 905	
Food purchased: Animal Vegetable	Per cent. 64.0 36.0	Per cent. 28. 0 72. 0	91.3	Per cent. . 3 99. 7	Per cent. 45. 5 54. 5	
Total	100.0	100.0	100.0	100.0	100.0	

In the following table a brief summary is given of the food consumed per man per day in the twenty negro dietaries.

Table 64.—Summary of results of negro dietary studies.

[Food per man per day.]

	Prot	ein.	Fa	ıt.	Carboh	ydrates.	Fuel value.	Nutritive ratio.
Dietary No. 98, farmer: Animal Vegetable	Grams. 49 48	Lbs. 0.11 .11	Grams. 137 11	Lbs. 0.30 .02	Grams. 50 508	Lbs. 0.11 1.11	Calories. 1,680 2,380	1: 9.2
Total	97	. 22	148	. 32	558	1. 22	4, 060) 1. 0.2
Dietary No. 99, farmer: Animal Vegetable	52 40	.11	119	. 26	65 360	.14	1, 585 1, 685	1: 7.7
Total	92	. 20	124	.27	425	.94	3, 270] 1
Dietary No. 100, farmer, summer: Animal Vegetable.	2 42	.01	41 16	.09	372	.82	395 1, 845	1:11.4
Total	44	.10	57	. 13	372	. 82	2, 240	1.11.4
Dietary No. 130, farmer, winter: Animal Vegetable	3 32	. 01	43 17	. 09	389	. 86	410 1,885	1:15.0
Total	35	. 08	60	. 13	389	. 86	2, 295)
Average of dietaries, Nos. 100 and 130: Animal	2 37	.01	42 16	.09	380	.84	400 1, 865	1:13.2
Total	39	. 09	58	. 13	380	. 84	2, 265)
Dietary No. 101, farmer: Animal Vegetable	27 44	.06	113 13	. 24	27 405	.06	1, 270 1, 960	1:10.1
Total	71	. 16	126	. 27	432	. 95	3, 230	
Dietary No. 102, sawmill labor- er, summer: Animal Vegetable.	26 33	. 06	74 11	.16	26 403	.06	900 1,890	1:10.5
Total	59	. 13	85	. 18	429	. 95	2,790)
Dietary No. 131, sawmilllabor- er, winter: Animal Vegetable.	8 50	. 02	110	. 24	390	. 86	1, 055 1, 880	1:11.3
Total	58	. 13	118	. 26	390	. 86	2,935	11111
Average of dietaries Nos. 102 and 131: Animal Vegetable.	17 41	.04	92	. 20	13 396	.03	975 1, 885	1.11.1
Total	58	. 13	101	. 22	409	.90	2,860	1:11.1
Dietary No. 103, cotton-planta- tion laborer: Animal Vegetable	33 60	. 07	261 22	. 57	649	1.43	2, 560 3, 110	1:13.9
Total	93	. 20	283	. 62	649	1.43	5, 670]
Dietary No. 104, cotton-planta- tion laborer: Animal Vegetable	29	. 06	231	. 51			2, 270)
	70	. 15	21	. 05	666	1.47	3, 210	1: 12. 5
Total	99	. 21	252	. 56	666	1.47	5, 480	J

Table 64.—Summary of results of negro dietary studies—Continued.

	Prot	ein.	Fa	t.	Carboh	ydrates.	Fuel value.	Nutritive ratio.
Dietary No. 105, farm manager: Animal Vegetable	Grams. 20 29	Lbs. 0.05 .06	Grams. 134	Lbs. 0.29	Grams. 6 249	Lbs. 0.10 .55	Calories. 1, 306 1, 175	1:11.7
Total	49	. 11	138	.30	255	. 56	2, 535	1
Dietary No. 132, farmer: Animal Vegetable	8 18	. 02	74	.16	225	. 50	720 1,080	1:15.9
Total	26	.06	83	. 18	-225	.50	1,800)
Dietary No. 133, farmer, woman: Animal. Vegetable	10 67	.02	105 26	. 23	649	1. 43	1, 020 3, 175	1:12.3
Total	77	.17	131	. 29	649	1.43	4, 195	J
Dietary No. 134, farmer: Animal Vegetable	19 67	.04	114 27	. 25	627	1.38	1, 140 3, 095	1:11.0
Total	86	.19	141	. 31	627	1.38	4, 235)
Dietary No. 135, farmer: Animal Vegetable	7 47	.02	63 22	.14	458	1.01	615 2, 275	1:12.1
Total	54	.12	85	. 33	458	1.01	2, 890)
Dietary No. 136, farmer: Animal Vegetable	12 37	. 03	104 15	. 23	362	. 80	1, 015 1, 775	1:12.9
Total	49	. 11	119	. 26	362	.80	2,790	J
Dietary No. 137, farmer: Animal Vegetable	1 30	. 07	12 15	.03	304	. 67	115 1,510	1:11.8
Total	31	.07	27	.06	304	. 67	1, 625)
Dietary No. 138, farmer: Animal Vegetable	16 36	. 03	107 13	. 24	9 458	. 02	1, 100 2, 145	1:14.2
Total	52	.11	120	. 27	467	1.03	3, 245	
Dietary No. 139, farmer: Animal Vegetable	25 55	06 . 12	247 22	. 54	1 517	1.14	2, 405 2, 550	1:14.1
Total	80	.18	269	. 59	518	1.14	4, 955	J
Dietary No. 140, plantation hand: Animal Vegetable	20 32	. 04	164 18	.36	1 323	.71	1, 610 1, 625	1:14.2
Total	52	.11	182	. 40	324	. 71	3, 235	1.14.2
Dietary No. 141, farmer: Animal Vegetable	9 24	.02	90	. 20	1 213	.47	880 1, 055	1:13.3
Total	33	. 07	99	. 22	214	. 47	1,935	1:10.0
Average of above dietaries: Animal Vegetable	19 43	.04	117	. 26	9 427	. 02	1, 205 2, 065	1:11.8
Total	62	14	132	. 29	436	. 96	3, 270	1.11.0
Dietary with minimum protein: Animal Vegetable	8 18	. 02	74 9	.16	225	.50	720 1, 080	1:15.9
								1.10.0

TABLE 64.—Summary of results of negro dietary studies—Continued.

-	Protein.		Fat.		Carbohydrates.		Fuel value.	Nutritive ratio.
Dietary with maximum protein: Animal Vegetable	29	Lbs. 0.06 .15	Grams. 231 21	Lbs. 0.51 .05	Grams.	Lbs.	Calories. 2, 270 3, 210	1:12 5
Total	99	. 21	252	. 56	666	1.47	5, 480	
Dietary with minimum energy: Animal Vegetable	1 30	.07	12 15	.03	304	. 67	115 1,510	1:11.8
Total	31	. 07	27	. 06	304	. 67	1, 625	}
Dietary with maximum energy: Animal Vegetable	33 60	.07	261 22	. 57	649	1.43	2, 560 3, 110	1:13.
Total	93	. 20	283	. 62	649	1.43	5, 670)

DISCUSSION OF RESULTS.

It is evident that the families in and near the village of Tuskegee whose condition and food consumption are here reported do not fairly represent the average plantation negroes who make up the larger part of the colored population of the black belt. They may represent even less accurately the colored population of the town. They have been influenced more or less by the Tuskegee Institute. It seems probable that the families on the plantation at a distance from Tuskegee whose dietaries are reported here more nearly represent the average plantation negroes. The statistics are in both cases limited in number, and it is evident that it would be unwise to make broad and definite generalizations regarding the food of the negro in the Southern States, its effect upon his physical, mental, and moral character and efficiency, and the means that should be adopted for its improvement. These investigations were intended rather as preliminary work in a field where an extended and accurate survey is needed.

Such information as could be obtained from conversation with people who are familiar with the negro population of the Southern States and personal observations leave the impression that the condition of the average negro family resembles Nos. 100-104, rather than the more thrifty families like Nos. 98 and 99. These, and especially No. 98, are evidently exceptions and presumably quite rare ones. The statements of Mr. Washington, of Tuskegee, as well as those of other gentlemen who have had large opportunities for observation, indicate that the one-room cabin is the common habitation and that the ordinary furnishings and ordinary diet are decidedly inferior to the average of those here reported.

It is evident that while the diet of the negro in the South is a very important factor of his character and condition, its effect is hardly to be separated from that of the other conditions of his existence. Diverse statistical and sociological data will be necessary before all the desired conclusions can be reached.

Much may be learned, however, from such inquiries as these. Further inquiries are now in contemplation, and it is believed the data here recorded can be best discussed when more material is available. Meanwhile, a brief comparison of the negro dietaries with dietaries of people of various conditions and with so-called dietary standards may not be without interest. Such a comparison is made in Table 65.

Table 65.—Comparison of Tuskegee negro dietaries with other dietaries in this country and in Europe and with dietary standards.

[Quantities per man per day.]

Dietaries.	Protein.		Fat.		Carboh	ydrates.	Fuel value.	Nutritive ratio.	
Negroes Near Tuskegee. No. 137, farmer No. 132. farmer No. 141, farmer	Grams. 31 26 33	Lbs. 0.07 .06 .07	Grams. 27 83 99	Lbs. 0.06 .18 .22	Grams. 304 225 214	Lbs. 0. 67 . 50 . 47	Calories. 1,625 1,800 1,935	1:11.8 1:15.9 1:13 3	
No. 100, farmer, summer No. 130, farmer, winter	44 35	.10	57 60	.13	372 389	. 82	2, 240 2, 295	1:11.4 1:15.0	
Average	39	09	58	. 13	380	. 84	2, 265	1:13.2	
No. 105, farm manager No. 136, farmer	49 49	.11	138 119	.30	255 362	. 56	2, 535 2, 790	1:11.7 1:12.9	
No. 102, sawmill laborer, sum- mer No. 131, sawmill laborer, winter	59 58	. 13	85 118	.18	429 390	. 95	2, 790 2, 932	1:10.5 1:11.3	
Average	58	. 13	101	. 22	409	.90	2,860	1:11.1	
No. 135, farmer No. 101, farmer No. 140, plantation hand. No. 138, farmer No. 99, farmer No. 98, farmer No. 133, farmer—woman. No. 134, farmer No. 139, farmer No. 139, farmer	54 71 52 52 92 97 77 86 80	. 12 . 16 . 11 . 11 . 20 . 22 . 17 . 19	85 126 182 120 124 148 131 141 269	. 33 . 27 . 40 . 27 . 27 . 32 . 29 . 31 . 59	458 432 324 467 425 558 649 627 518	1. 01 . 95 . 71 1. 03 . 94 1. 22 1. 43 1. 38 1. 14	2, 890 3, 230 3, 235 3, 245 3, 270 4, 060 4, 195 4, 235 4, 955	1:12.1 1:10.1 1:14.2 1:14.2 1:7.7 1: 9.2 1:12.3 1:11.0 1:14.1	
No. 104, cotton plantation la- borer	99	. 21	252	. 56	666	1.47	5, 480	1:12.5	
No. 103, cotton plantation la- borer	93	. 20	283	. 62	649	1.43	5, 670	1:13.9	
Average of all	62	. 14	132	. 29	436	. 96	3,270	1:11.8	
POOR PEOPLE, UNITED STATES. 25 families in poorest part of Philadelphia: Smallest dietary, negro Largest dietary, German Average	66 202 109	. 15 . 45 . 24	68 206 108	. 15 . 45 . 24	181 608 435	. 40 1. 34 . 96	1, 630 5, 235 3, 235	1: 5.4 1: 5.3 1: 6.2	
26 families in poorest part of Chicago: Smallest dietary Largest dietary Average	86 168 119	.19	100 204 141	. 22 . 45 . 31	213 626 398	. 47 1. 38 . 88	2, 195 4, 950 3, 425	1: 4.6 1:11.3 1: 6.0	
PEOPLE IN MORE COMFORTA- BLE CIRCUMSTANCES, UNITED STATES.									
Farmer, Connecticut I armer, Connecticut A verage 5 dietaries, farmers in	79 104	. 17	117 156	. 26	354 494	. 78 1. 09	2, 865 3, 900	1: 7.8 1: 8.1	
Connecticut Carpenters, Connecticut Tinner, Indiana	92 105 90	. 20 . 23 . 20	114 136 134	. 25 . 30 . 30	483 362 408	1.06 .80 .90	3, 420 3, 185 3, 285	1: 8.1 1: 7.4 1: 7.9	
Boarding house well-paid ma- chinists, etc., Connecticut	103 110	. 23 . 24	152 210	. 34	401 412	.88	3, 490 4, 090	1: 7.3 1: 8.1	
chanics, etc	105 5	. 23	152	. 34	420	. 92	3, 570	1: 7.3	

Table 65.—Comparison of Tuskegee negro dietaries with other dietaries in this country and in Europe and with dietary standards—Continued.

Dictaries.	Prot	ein.	Fa	t.	Carbohy	drates.	Fuel value.	Nutritive ratio.
PEOPLE IN MORE COMFORTA- BLE CIRCUMSTANCES, UNITED STATES—continued.	Grams.	Lbs.	Grams.	Lbs.	Grams.	Lbs.	Calories.	
boarders operatives in cotton mills	132	0. 29	200	0.44	594	1.21	4, 650	1: 7.
Average 20 dietaries of people at active exercise, mechan- ics, etc., in Massachusetts and Connecticut	154	. 34	227	. 50	626	1.38	5, 275	1: 7.
PROFESSIONAL MEN.								
Average of 9 dietaries	104	. 23	122	. 27	428	. 94	3, 315	1: 6
COLLEGE STUDENTS' BOARDING CLUBS, UNITED STATES.								
Average of 15 dietaries	108	. 24	148	. 33	460	1. 01	3, 700	1: 7.
POOR PEOPLE SCANTILY NOUR- ISHED, EUROPEAN.								
Working people, Saxony, average 13 dietaries Mechanics, laborers, beggars,	69	. 15	45	.10	384	. 85	2, 275	1: 7.
etc. Naples, Italy, average 5 dietaries Farm laborer, Saxony, food	76	. 17	38	.08	396	. 87	2, 290	1: 6
mainly vegetable	80	.18	37	. 08	504	1.11	2,740	1: 7
mainly vegetable	83	. 18	17	. 04	373	1. 26	2, 845	1: 7
EOPLE IN MORE COMFORTABLE CIRCUMSTANCES. AT MODER- ATE WORK. EUROPEAN.								
avaria, average 11 dietaries of carpenters, coopers, and lock- smiths	122 129	. 27	34 33	. 08	570	1. 26 1. 30	3, 150 3, 250	1: 5
easants near Moscowverage 5 dietaries of farm	137	. 28	55	. 12	589 542	1. 19	3, 295	1: 4
laborers, Bavariaverage 6 dietaries of mechan-			79		523	1. 15		1: 5
ics, etc., southern Sweden easant farm laborer, Italy	134 118	. 30	65	. 17	628	1. 13	3, 435 3, 665	1: 6
PEOPLE AT ACTIVE EXERCISE, EUROPEAN.								
verage 5 dietaries of machin- ists, etc., southern Sweden	189	. 42	110	. 24	714	1.57	4, 725	1: 5
ists, etc., southern Sweden arm laborers, Austria, diet, corn meal and beans	159	. 35	62	. 14	977	2. 15	5, 235	1: 7
avanese in Java village, World's Fair, Chicago United States Army rations	66 120	. 15	19 161	. 04	254 454	. 56 1. 00	1, 490 3, 850	1: 4
DIETARY STANDARDS.								
Curopean:	00	90		10	400	00	2, 425	1: 5
Woman at moderate work. Man at moderate work Man at hard work merican:	92 118 145	. 20 . 26 . 32	44 56 100	.10 .12 .22	400 500 450	. 88 1. 10 . 99	3, 055 3, 370	1: 4
Woman with light muscu- lar exercise	90	. 20					2, 400	1: 5
Woman with moderate muscular work	100	. 22					2,700	1: 5
Man without muscular work	100	. 22					2,700	1: 5
Man with light muscular work	112	. 25					3, 000	1: 5
Man with moderate muscu- lar work	125	. 28					3, 500	1: 5
Man with hard muscular work	150	. 33					4, 500	1: 6

In the above table the figures for mechanics' families in New Jersey, Indiana, and Tennessee are from studies made in connection with the general inquiry of which the present one forms a part. The rest of the figures in the table are taken from a summary of results of investigations of dietaries in different parts of the world. They are selected as illustrating as well as possible with so limited a number of cases the differences in the kinds and amounts of nutriment in the food of people of different places and classes. Unfortunately the amount of available information upon this larger subject is quite limited. The summary just referred to includes the studies of less than 400 different dietaries. They will, however, suffice for general comparison.

The dietary standards in the article are intended to represent the quantities of nutrients appropriate to an average person in each of the classes referred to. They are based upon two classes of data, namely, the amounts of nutrients actually contained in the food of well nourished people and the results of more or less accurate experiments upon the nutrients of single individuals also well nourished. The European authorities quoted are those whose judgment is commonly accepted by their fellow specialists throughout the world. The Arterican estimates have been made more liberal on account of the results of late investigations in this country, which were not available to the European investigators and which imply a larger food consumption by people of the laboring classes in this country than by those of corresponding classes in England and especially on the Continent of Europe.²

Bearing in mind that these so-called dietary standards are not in any way absolute, but simply represent the best knowledge of the subject we have to day, the figures for the nutrients in the food of a man at moderate muscular work may be taken as a basis for comparison. two principal items are the quantities of (1) protein, the so-called "flesh formers," and (2) fuel values. According to the German standard of Voit, a man engaged in moderately hard manual labor—a carpenter, mason, or day laborer, for instance—ought to have 0.26 pound of protein to form blood, muscle, bone, and other nitrogenous parts of the body, and thus make up for the constant wear and tear of the bodily machine; and, in addition, enough of the fuel ingredients, fats and carbohydrates, to furnish 3,055 calories of energy to be transformed into heat, muscular power, and other forms of energy needed to keep the bodily machine in successful operation. The nutritive ratio of such a dietary. i. e., the proportion of protein to fuel ingredients (reckoning 1 part by weight of fats as equivalent in fuel value to 21 parts of carbohydrates) would be 1:5.3.

The American standard, suggested above, for a man of the same class assumes that he does, on the whole, rather more work and needs

¹U. S. Dept. Agr., Office of Experiment Stations Bul. 21.

²For discussion of this subject see U.S. Dept. Agr., Office of Experiment Stations Bul. 21, p. 206.

nutrients in his daily food sufficient to furnish 0.28 pound of protein and 3,500 units of energy with a nutritive ratio of 1:5.8.

The estimates for men at more active muscular work are considerably larger, and for those engaged in occupations which require but little muscular exercise, as is apt to be the case with professional and business men, the needed amounts of protein and energy are assumed to be smaller.

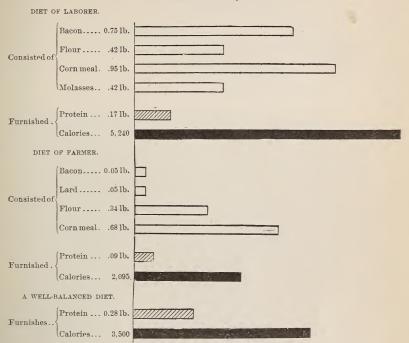
It will be observed that the figures of Table 65 for the food consumption of well-fed and well-to-do people generally in the United States and those of similar classes in Europe agree more or less closely with the dietary standards. The negro dietaries show on the average a liberal allowance of fuel ingredients in the food as measured by the fuel values. But the quantities of protein in the negro dietaries are extremely small, in general from one-half to two thirds the amounts which the standards call for and which are actually found in the food of well-to-do and well-nourished people of different classes in the United States and in Europe. The nutritive ratios of the negro dietaries are very wide as compared with those of both the dietary standards and the actual dietaries of people who are ordinarily assumed to be well nourished. Thus in the food of well-to-do and well-paid mechanics in Germany the quantities of protein average about 0.27 pound, being generally larger in the food of those who are engaged in more active manual labor. The quantities in the American dietaries with which those of the negroes are compared are on the whole rather larger than the foreign, but in the negro dietaries the range is only from 0.10 to 0.22 pound. The fuel values in the European dietaries range from 1,650 to 5,235, in the American dietaries from 1,630 to 5,285, and in the Tuskegee dietaries from 1,625 to 5,670.

Comparing these negro dietaries with other dietaries and dietary standards it will be seen that—

- (1) The quantities of protein are very small; roughly speaking, the food of these negroes furnished one-third to three-fourths as much protein as are called for in the current physiological standards and as are actually found in the dietaries of well fed whites in the United States and well-fed people in Europe. They were, indeed, no larger than have been found in the dietaries of the very poor factory operatives and laborers in Germany and the laborers and beggars in Italy.
- (2) In fuel value the negro dietaries compare quite favorably with those of well-to do people of the laboring classes in Europe and the United States.
- (3) The marked peculiarity of the negro dietaries, namely, their lack of protein, is shown in the nutritive ratios. While the proportion of protein to fuel ingredients in the dietary standards and in the food of well-fed wage workers ranges from 1:5 to 1:7 or 8, and is about 1:5.5 or 1:6 in the dietary standards, the nutritive ratio of the negro dietaries range from 1:7 to 1:16. Leaving out two quite exceptional cases, the lowest was 1:10 and the average 1:11.8.

The following diagram ¹ shows the relative amounts of food materials and the nutritive value of the actual daily dietaries of a negro field laborer and farmer as compared with the nutritive value which a properly balanced dietary should have:

Actual daily dietaries of negro field laborer and farmer compared with a well-balanced standard dietary.



The field laborer was both underfed and overfed, since the food contained too little protein and too much fuel value. The farmer was underfed; the food had only one-third of the protein and two-thirds the fuel value needed.

¹This diagram is adapted from a wall chart used at Tuskegee Institute and exhibited in the negro building at the Atlanta Exposition in 1895.

